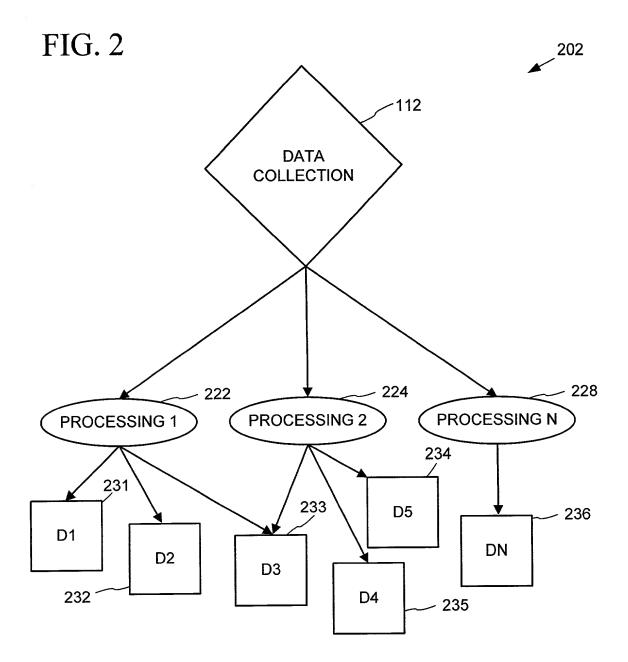
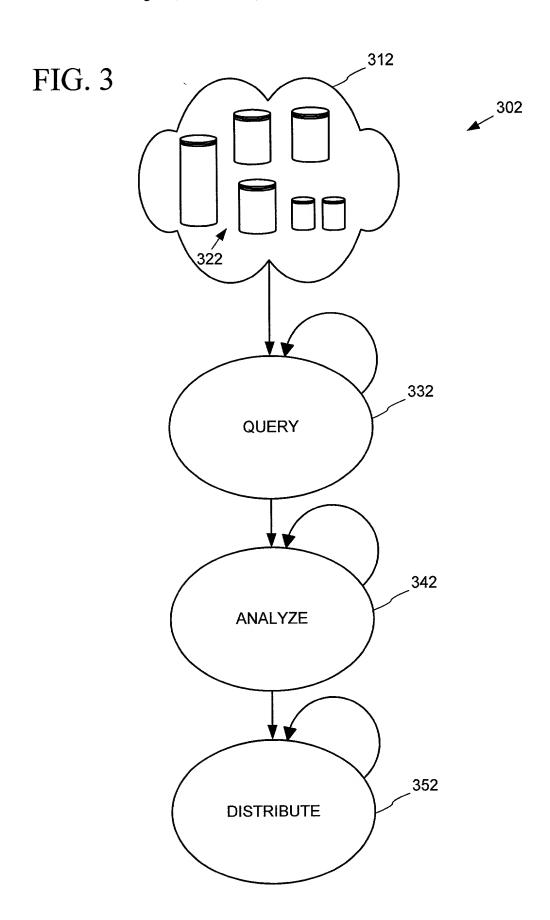
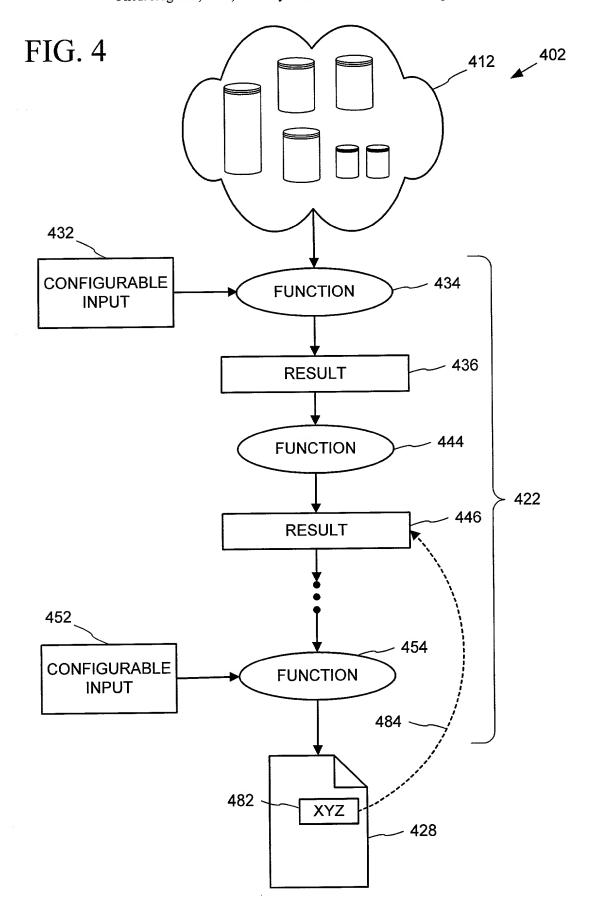


Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 2 of 103

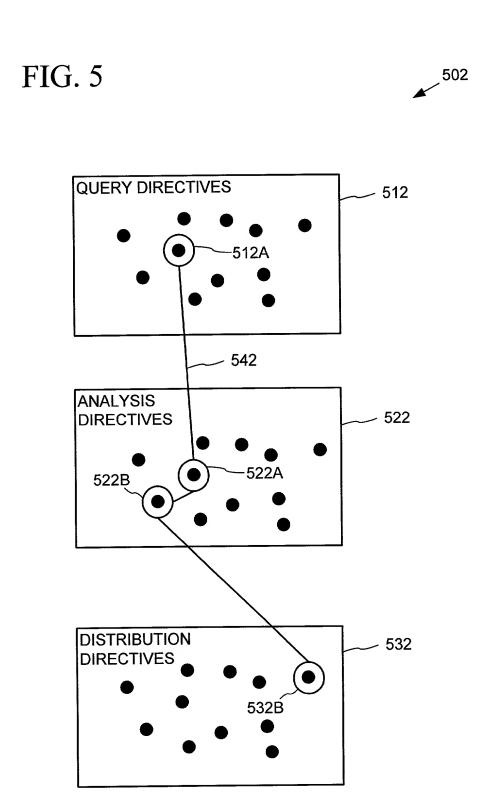


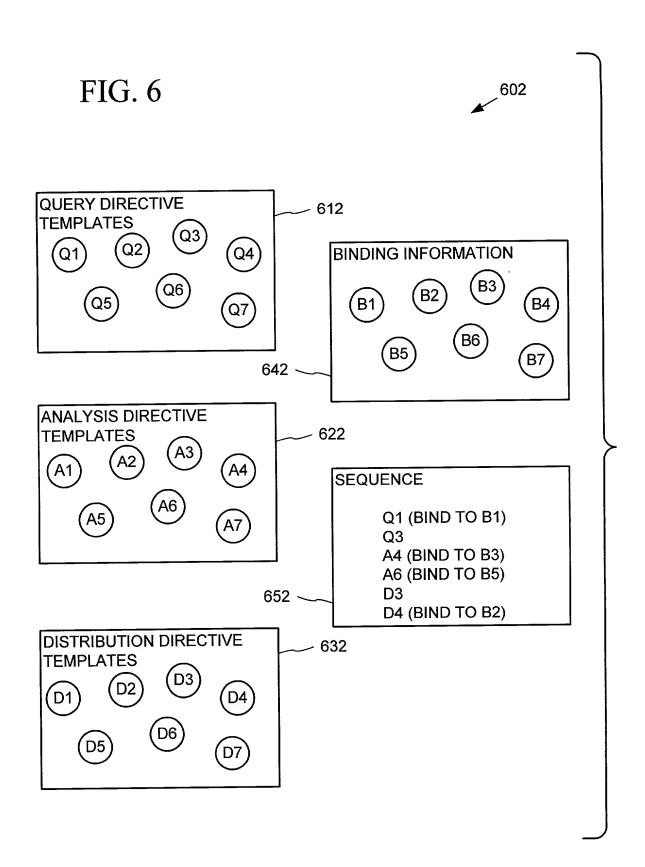


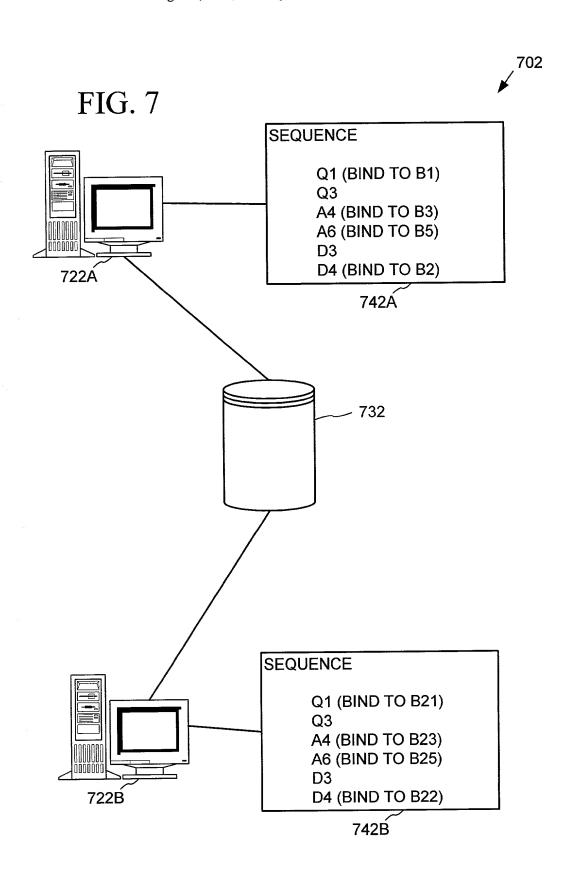
Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 4 of 103

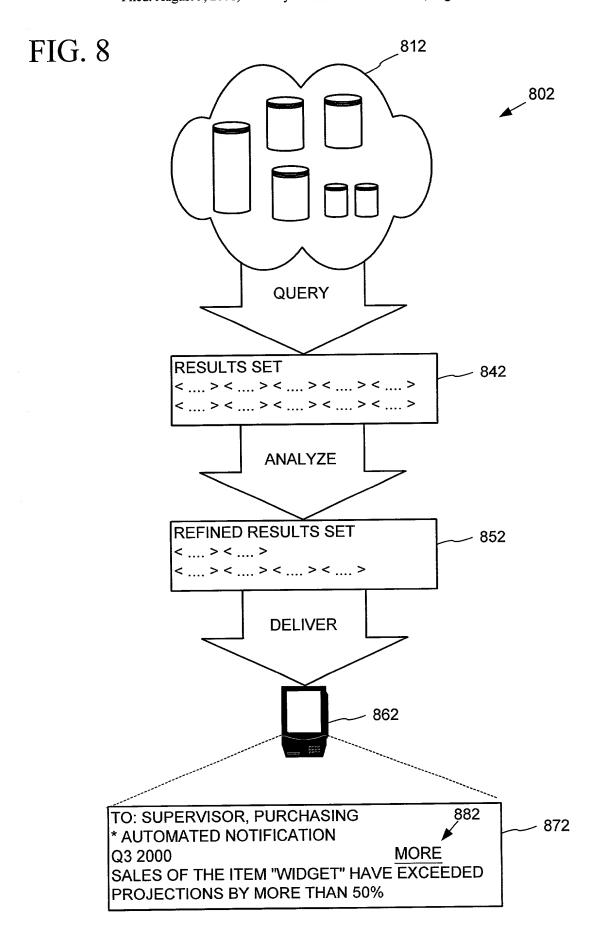


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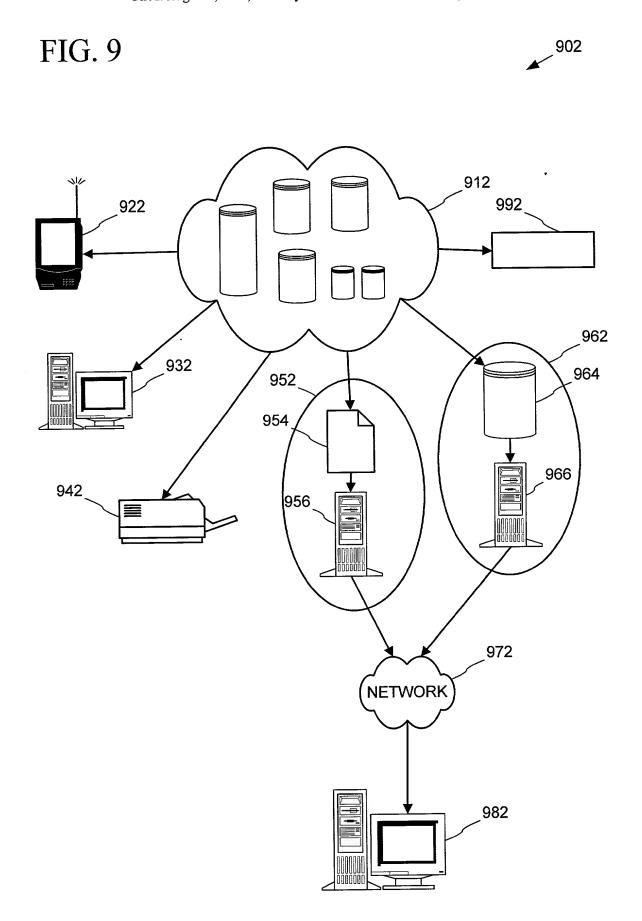




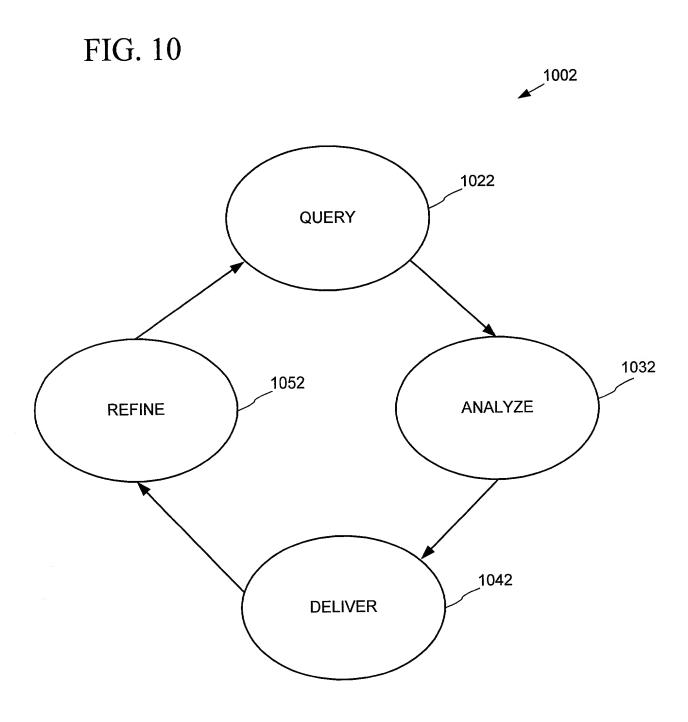


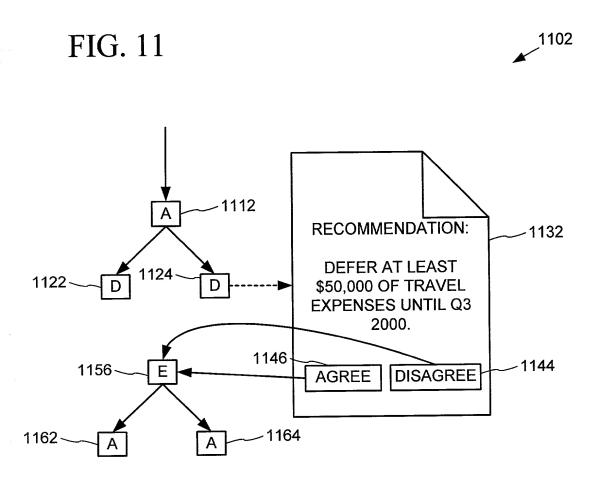


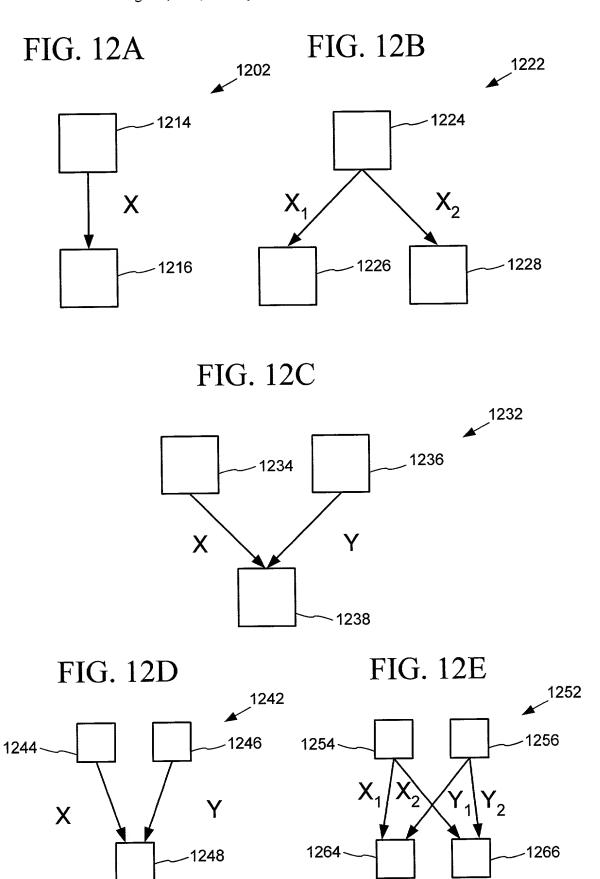
Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 9 of 103



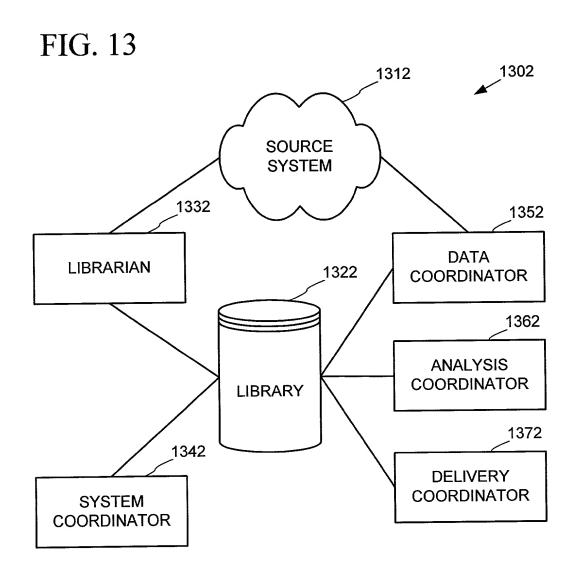


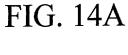


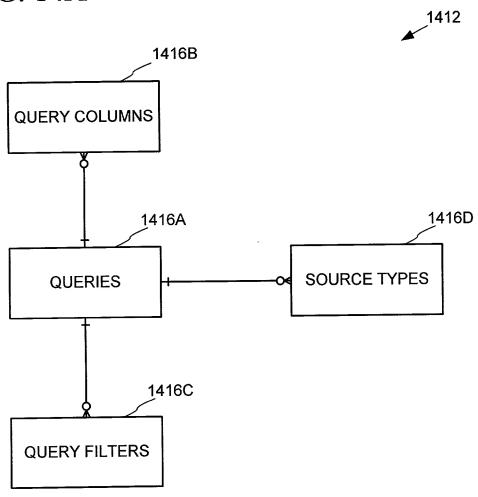




Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 13 of 103







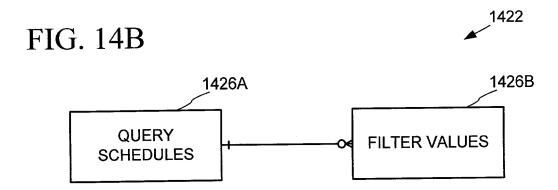
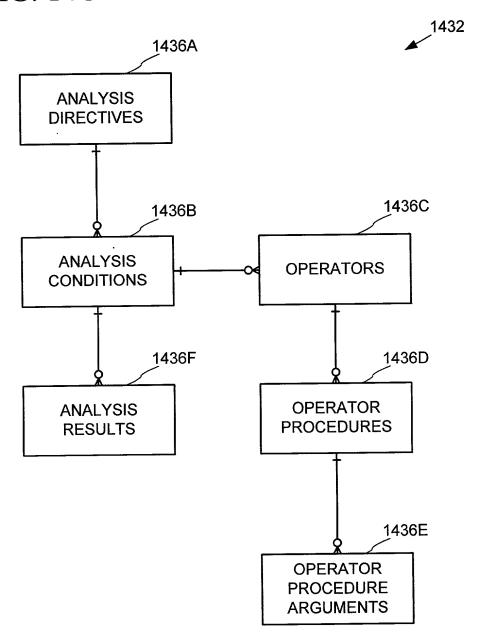


FIG. 14C



Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 16 of 103

FIG. 14D

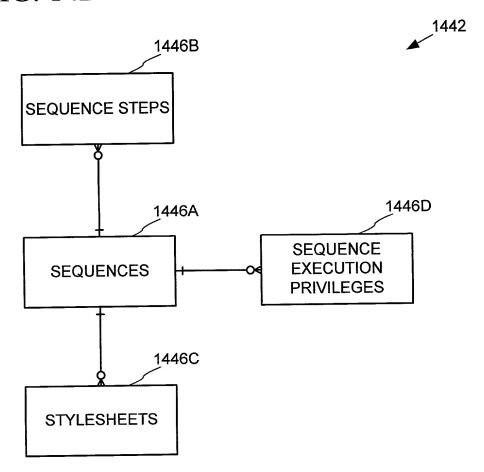


FIG. 14E

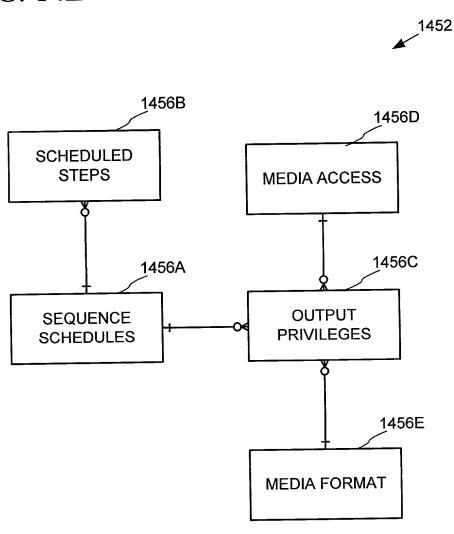
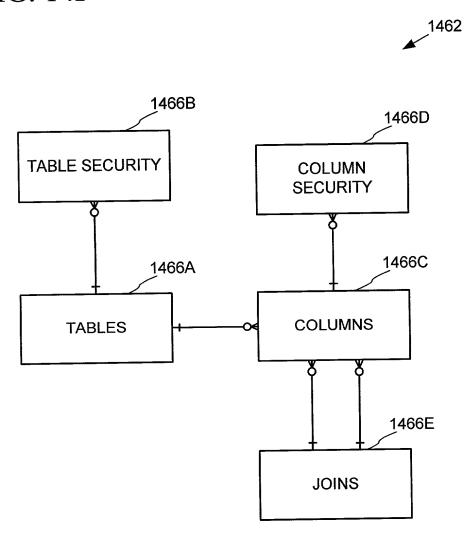
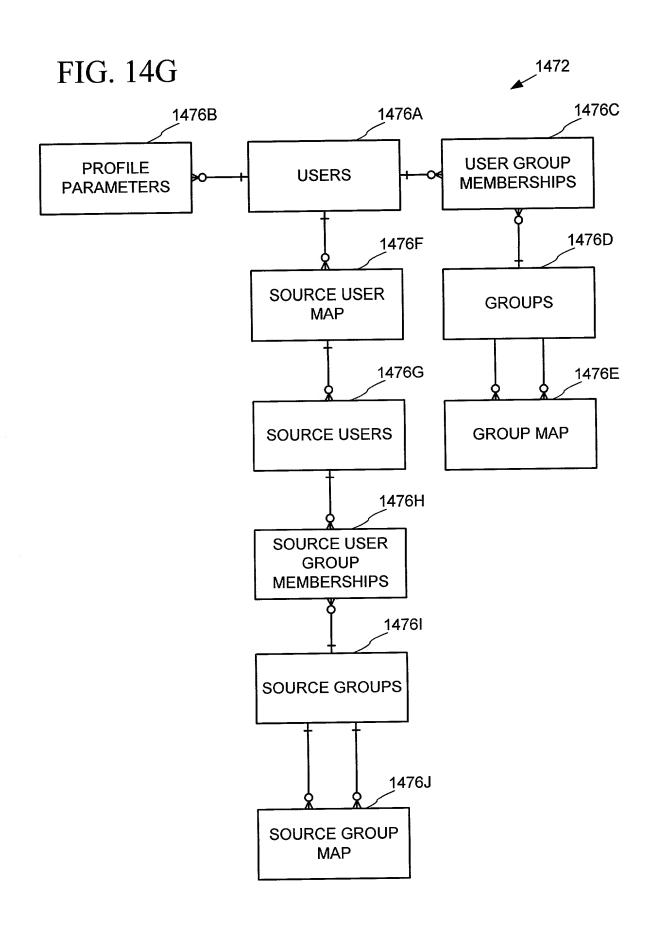


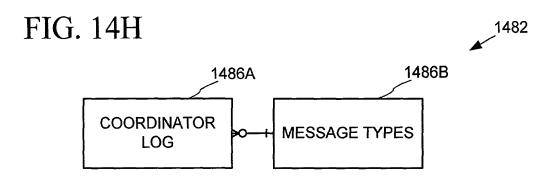
FIG. 14F





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Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 20 of 103



	g	QUERY DIRECTIVES	TIVES			
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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 21 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS (503) 226-7391, Inventors: Storms (503) 226-7391, Inventors: SYSTEMS (503) 226-7391, Inventor

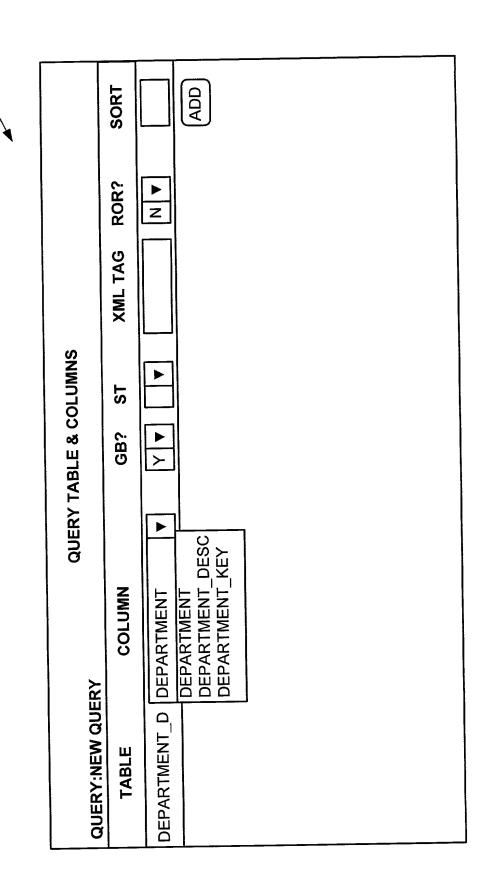
FIG. 15B

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ASSET_BOOK_D ASSET_EMPLOYEE_D ASSET_TYPE_D ASSET_TYPE_D	AR_SHIP_VIA_D							
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ASSET_INVENTORY_F ASSET_TYPE_D	ASSET_EMPLOYEE_D							
ASSET_TYPE_D	ASSET_INVENTORY_F							
AlithOBizER D ▼	ASSET_TYPE_D							
	AUTHORIZER_D							
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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 22 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION FROM

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Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 23 of 103

FIG. 15D

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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 24 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION FROM A DATA COLLE

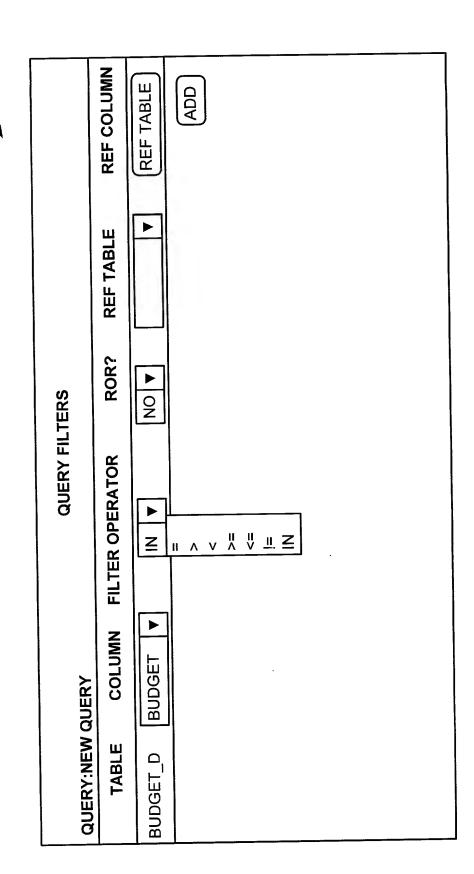
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INCOME_STMT_A	PTD_BUDGET	z	SUM	N SUM PTD_BUDGET	Z
INCOME STMT A	PTD VARIANCE	z	SUM	N SUM PTD_VARIANCE N	Z

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TABLE	COLUMN	GB?	ST	XML TAG	ROR?	SORT
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INC_STMT_LINES_D	LINE_NAME	>		LINE_NAME	z	
INCOME_STMT_A	PTD_ACTUAL	z	SUM	PTD_ACTUAL	Z	
INCOME_STMT_A	PTD_BUDGET	z	SUM	PTD_BUDGET	z	
INCOME_STMT_A	PTD_VARIANCE	z	SUM	PTD_VARIANCE N	Z	
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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 25 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Systems And Inventors: Systems A

FIG. 15F



Gregory L. Maurer, Esq., Klarquist Sparkman, L.P., 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 26 of 103

		QUERY FILTERS	TERS		
QUERY:NEW QUERY	ERY				
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		ADD FILTER FINISH			

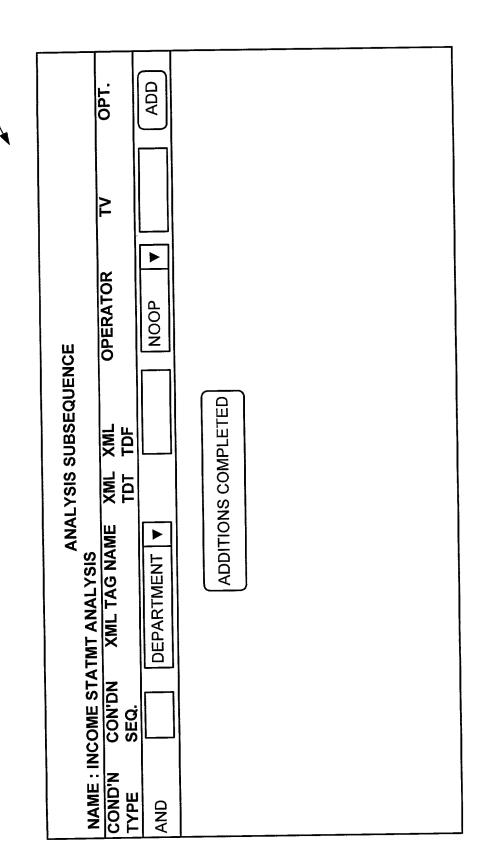
Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 27 of 103

IG. 15H

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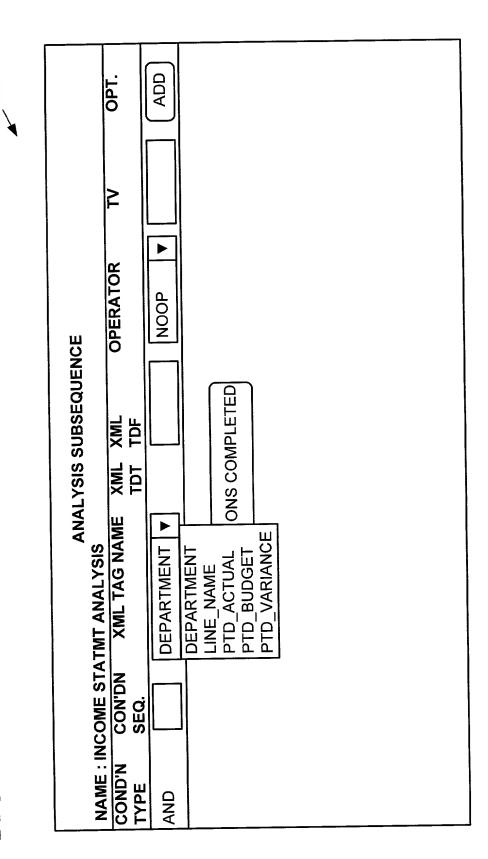
Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 28 of 103

FIG. 15I



Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Siled: August 9, 2001, Attorney Docket No.: 6115-60713, Page 29 of 103

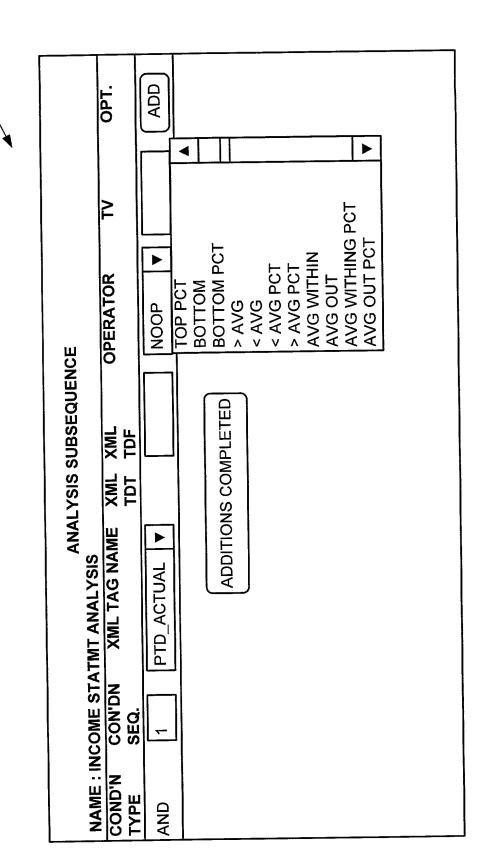
FIG. 15J



Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 30 of 103

FIG. 15K

1522



Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 31 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Segon 97204, Process of Proc

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AND	2	PTD_VARIANCE ▼		^	300000	MOD DEL
AND	3	PTD_VARIANCE		TOP PCT	10	MOD DEL
		ADDITIO	ADDITIONS COMPLETED			

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 32 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORMS (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS (503) 226-7391, Inventors: SCHEURICH EXECUTABLE STORMS (503) 226-7391, Inventors: SCHEURICH EXECUT

FIG. 15M

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25	FSV	FSV	AVAIL	•	NB	MOD
26	COST CENTER SCORING 1	COST CENTER SCORING	DISAB ▼	•	rs	MOD
27	COST CENTER SCORING 2	CSS PTD-VARIANCE	AVAIL V IN MOD	•	FS	MOD

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 33 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORY, Manuer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORY, Manuer, Esq., Manuer, Esq., Manuer, Esq., Manuer, Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORY, MANUER, MA

1526

SEQU	UENCE	SEQUENCE NAME: INCOME STATEMENT ANALYSIS	ADD OR EDIT SEQUENCE STEP INFORMATION
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Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 34 of 103

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₽	STEP DIF	DIRECTIVE TYPE	DIRECTIVE ID	LUB LUD	
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78	2	ANALYSIS DIRECTIVE	▼ DIRECTIVE		
		QUERY DIRECTIVE ANALYSIS DIRECTIVE EVENT DIRECTIVE DISTRIBUTION DIRECTIVE	TIVE		

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 35 of 103

SEO	UENCE NAME: IN	ADD OR EDIT SEQUENCE STEP INFORMATION SEQUENCE NAME: INCOME STATEMENT ANALYSIS	ENCE STEP INFO	ORMATION		
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28	3 DISTRIBUTION DIRECTIVE	N DIRECTIVE ▼	DIRECTIVE			

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 36 of 103 SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, 503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204,

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 37 of 103

1536 CREATE **DISTRIBUTION FORMAT** SEQUENCE NAME: INCOME STATEMENT ANALYSIS **FORMAT** HTML EXCEL HTML WAP

IG. 15R

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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 38 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 109/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION FROM A DA

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>	•	•
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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 39 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION FROM A DATA COLLECTION

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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 40 of 103 SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE.

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Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 41 of 103

FIG. 15V

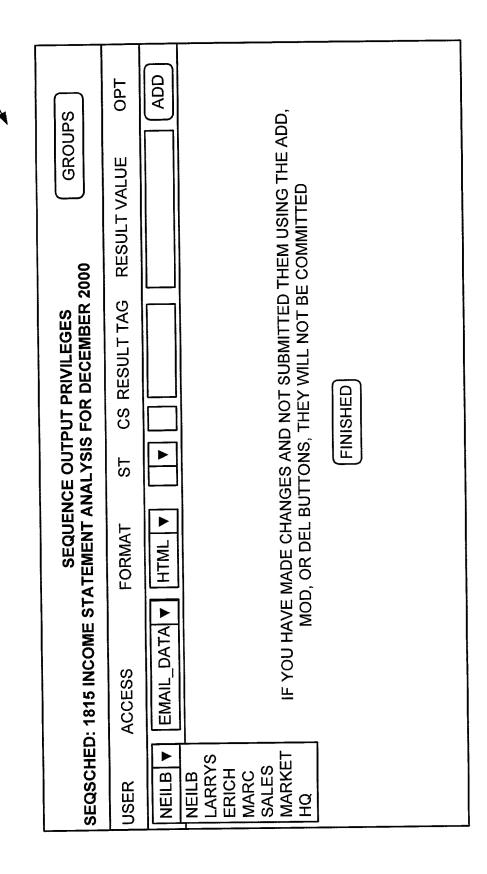
SELECT SOURCE INFORMATION	SCHEDULE ENTRY
SEQUENCE: INCOME STATEMENT ANALYSIS	ANALYSIS
STEP: 1	
QUERY: NEW QUERY	
SOURCE NAME	PART
SOURCE SET OAS ▼	
	CONTINUE

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 42 of 103

FIG. 15W

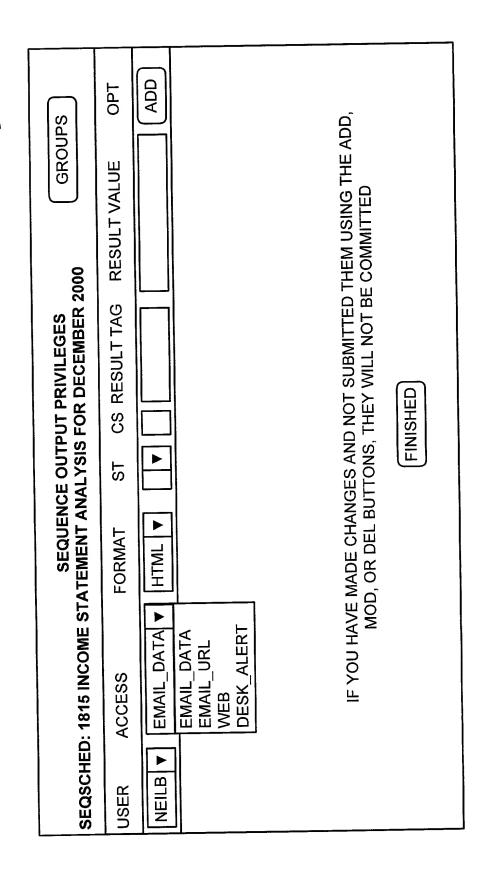
FILTER VALUES FOR QUERY SEQUENCE: INCOME STATEMENT ANALYSIS SCHEDULE: INCOME STATEMENT ANALYSIS SEQUENCE STEP: 1 NEW QUERY	FILTER VA STATEMENT ANAL STATEMENT ANAL	YSIS F	FILTER VALUES FOR QUERY IENT ANALYSIS IENT ANALYSIS FOR DECEMBER 2000
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FIG. 15X



Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 44 of 103

FIG. 15Y

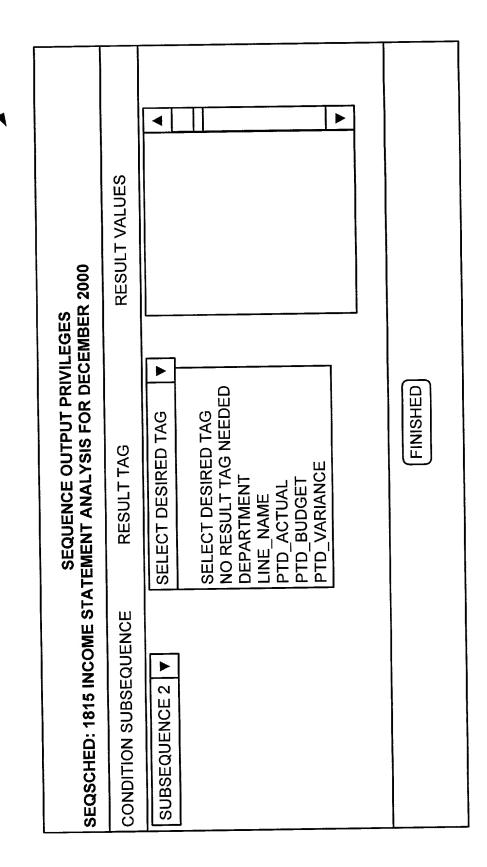


Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, page 45 of 103

ADD **OPT** IF YOU HAVE MADE CHANGES AND NOT SUBMITTED THEM USING THE ADD, GROUPS RESULT VALUE MOD, OR DEL BUTTONS, THEY WILL NOT BE COMMITTED SEQSCHED: 1815 INCOME STATEMENT ANALYSIS FOR DECEMBER 2000 **CSS RESULT TAG** SEQUENCE OUTPUT PRIVILEGES FINISHED ന ST PALM MAIL PALM VII FORMAT EXCEL HTML HTML WAP XML DATA ACCESS EMAIL NEILB USER

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 46 of 103 SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204,

FIG. 15AA



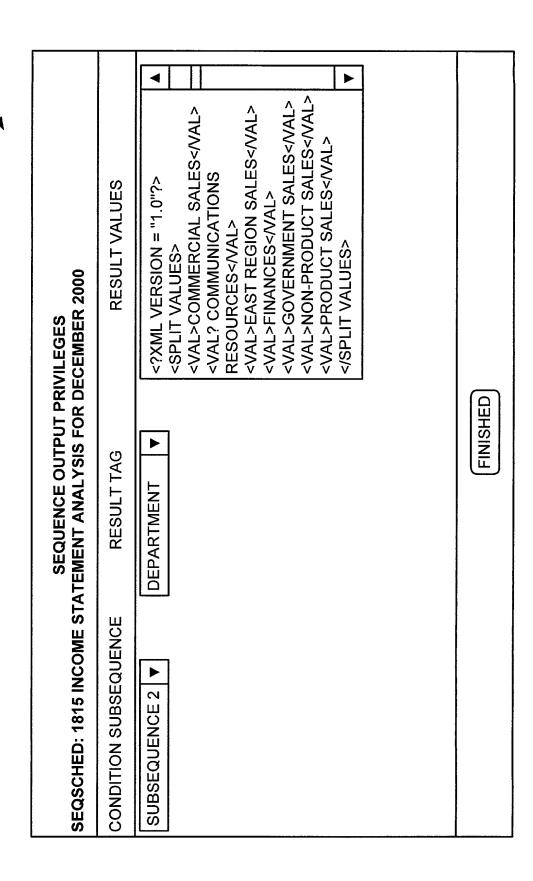
Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE Piled: August 9, 2001, Attorney Docket No.: 6115-60713, Page 47 of 103

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Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 48 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SOME STORY, Manuer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE STORY AND METHODS FOR ST

FIG. 15CC



Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, page 49 of 103

SEQSCHED	SEQSCHED: 1815 INCOME ST.	SEQUENCE OUTPUT PRIVILEGES E STATEMENT ANALYSIS FOR DECEMBER 2000	E OUTI	FOR	SEQUENCE OUTPUT PRIVILEGES MENT ANALYSIS FOR DECEMBER	2000	GROUPS	UPS
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				FINISHED	<u></u>			

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 50 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, p. 1516-7391, August 9, 2001, August 9, 200

FIG. 15EE

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SPOUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 51 of 103

SCHEDULE SEQUENCES		
SEQUENCE NAME USER SCHEDULE DESC	FREQ PRIC	PRIORITY
TEST SEQUENCE FOR PRIV ▼ LS	IMMEDIATE ▼ ADD	
SELECT SEQUENCE TO VIEW		
TEST SEQUENCE FOR PRIVS AND STEPS ▼	VIEW	
SEQUENCE: INCOME STATEMENT ANALYSIS USER: NB		
ID DESCRIPTION STATUS FREQ	START OPTIONS	SNC
1815 INCOME STAT'T ANALYSIS DEC 2001 SCHED DAILY	23-APR-2001 MOD 08:30 PM DEL DEL	

Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 52 of 103

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925, 103, SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION, APPLICATION FROM A DATA COLLECTION FROM A DATA COLLEC

TEXT EMAILER SMTP EMAIL DIR. (125) 1602 1608 1626 **PUBLISH** PAGE (87) PALETTE AND CANVAS FOR SEQUENCE (100) {PART QUANTITY SHORTAGES} SAVE RESULTS ADV. FILTER 1622 RESULTS (6/) RESULTS SAVE (108)SAVE (65)(72)1624 QUERY QUERY QUERY (26)(52)(33)QUERY (152) PUBLISHE CLEAR STORED RESULTS CLEAR **PAGES** (21) SCHEDULER (11) **CLEAR PUBLISHED PAGES** CLEAR STORED RESULTS 1610 SMTP EMAIL DIRECTIVE **CUSTOM DIRECTIVES** QUERY DIRECTIVE ADVANCED FILTER **EMAIL RESULTS** SAVE RESULTS PUBLISH PAGE *IEXT EMAILER* DISTRIBUTION *FILTER* FIG. 16A SCHEDULER DIRECTIVES **APPENDER ANALYSIS** MISC QUERY 1604

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 53 of 103

'IG. 16B

SEQUENCE PROPERTIES	RTIES		×
SEQUENCE NAME: DESCRIPTION: NOTES:		PART QUANTITY SHORTAGES FINDS PART QUANTITY SHORTAGES SAVE THIS ONE	OK
SEQUENCE AUTHOR	<i>;;</i> ;;	AUTHOR1 STATUS1	ADD VARIABLE
GLOBAL VARIABLES:	ABLES:		
CAPTION: VALUE:	CONNECT STRING JDBC:ORACLE.THI	N@123.245.23.1:1521	NAME: CONNECT_STRING :CONNECT30
CAPTION: VALUE:	DATABASI RRIC1234	DATABASE USER NAME NAME: USER_NAME RRIC1234	R_NAME
CAPTION: VALUE:	DATABASE SEQUENCE	DATABASE PASSWORD NAME: USER_PWDSEQUENCE	R PWD
CAPTION: VALUE:	OWNERNAME QRY_ANALYSIS	AME NAME: OWNERNAME	NERNAME
CAPTION: VALUE:	CURRENT PERIOD (1997-09) SEP-97	PERIOD NAME: CURPERIOD SEP-97	RPERIOD

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 54 of 103

1660 ID: 108 DIRECTIVE NAME: (ADFILTER) ADVANCED FILTER CANCE PARAM NAME (FILTER_EXP) FILTER EXPRESSION INPUT INPUT #REQUIRED_QUANTITY# >200 DB3(52) RESULT DATA INPUT 엉 DIRECTIVE PROPERTIES ACTIVITY

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204,

(503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 55 of 103

≥ SUM4 78260 178828 390000 3510 0 -43092 48750 -244800 -1440 COST CENTER ANALYSIS 244800 240000 1440 4800 Ш 48750 0 0 0 0 7 2 3 **CLEANING AND MAIN** ACCOMMODATION ACCOUNT DESC **ADVERTISING** CAR RENTAL BAD DEBT $\mathbf{\omega}$ AIRFARE ⋖ BROWSER

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 56 of 103

FIG. 18

1801

<IN PARAMETERS>

<PARAMETER PARAM TYPE="IN" PARAM_CAPTION="SQL"</pre>

PARAM DATA TYPE="STRING" PARAM_NAME="SQL"/>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="COLUMN TO SPLIT"</p>

PARAM DATA TYPE="STRING" PARAM NAME="SPLIT COLUMN"/>

<PARAMETER PARAM TYPE="IN" PARAM CAPTION="CONNECTION"

STRING" PARAM DATA TYPE="STRING"

PARAM NAME="CONNECTION STRING"/>

<PARAMETER PARAM TYPE="IN" PARAM CAPTION="DATABASE USER</p>

NAME" PARAM_DATA_TYPE="STRING" PARAM_NAME="USERNAME"/>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="DATABASE</pre>

PASSWORD" PARAM_DATA_TYPE="STRING" PARAM_NAME="PWD"/>

</IN_PARAMETERS>

<OUT PARAMETERS>

<PARAMETER PARAM TYPE="OUT" PARAM_CAPTION="RESULT DATA"</pre>

PARAM DATA TYPE="STRING" PARAM NAME="RESULTSET"/>

<PARAMETER PARAM TYPE="OUT" PARAM CAPTION="RESULT</p>

METADATA" PARAM DATA TYPE="STRING"

PARAM NAME="RESULTMETADATA"/>

<PARAMETER PARAM TYPE="OUT" PARAM CAPTION="SPLIT VALUE"</p>

PARAM DATA TYPE="STRING" PARAM NAME="SPLITVALUE"/>

</OUT PARAMETERS>

</DF DIRECTIVE DEFINITION>

FIG. 19A

1901

- < DF DIRECTIVE DEFINITION_LIST>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="SB1"
DIRECTIVE_NAME="SCHEDULER" DIRECTIVE_CATEGORY="DPA-MISC"
THREADING_EFFECT="SPLIT" DIRECTIVE_DESC="SCHEDULE DIRECTIVE"
DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1">

- <!-- CAN ADD A TYPE OR ICON NAME

--->

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="FREQUENCY"
PARAM_DATA_TYPE="STRING" PARAM_NAME="FREQUENCY" />
</IN PARAMETERS>

<OUT PARAMETERS />

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="DB2" DIRECTIVE_NAME="DATA DIRECTIVE" THREADING_EFFECT="SPLIT" DIRECTIVE_DESC="SQL DATADIRECTIVE THAT SPLITS RESULTS ON GIVEN COLUMN" DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1" DIRECTIVE_CATEGORY="DPA-MISC">

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="SQL"</pre>

PARAM DATA TYPE="STRING" PARAM_NAME="SQL" />

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="COLUMN TO SPLIT"
PARAM_DATA_TYPE="STRING" PARAM_NAME="SPLIT_COLUMN" />

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="CONNECTION STRING"</p>

PARAM_DATA_TYPE="STRING" PARAM_NAME="CONNECTION_STRING" />

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="DATABASE USER NAME"
PARAM DATA TYPE="STRING" PARAM NAME="USERNAME" />

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="DATABASE PASSWORD"
PARAM_DATA_TYPE="STRING" PARAM_NAME="PWD" />
</IN PARAMETERS>

FIG. 19B

_1902

- <OUT_PARAMETERS>
<PARAMETER PARAM</pre>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT DATA"

PARAMETER PARAM_TYPE="STRING" PARAM_NAME="PESULT SET" />

PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT METADATA"
PARAM DATA TYPE="STRING" PARAM NAME="RESULTMETADATA" />

<PARAMETER PARAM TYPE="OUT" PARAM CAPTION="SPLIT VALUE"</pre>

PARAM_DATA_TYPE="STRING" PARAM_NAME="SPLITVALUE" />

</OUT_PARAMETERS>

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="AB1" DIRECTIVE_NAME="TOPX FILTER" THREADING_EFFECT="STANDARD" DIRECTIVE_DESC="FILTER OUT TOP X ROWS FROM RESULTSET" DIRECTIVE_VENDOR="DPA" DIRECTIVE VERSION="1" DIRECTIVE CATEGORY="DPA-MISC">

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET METADATA"
PARAM DATA TYPE="STRING" PARAM NAME="RESULTMETADATA" />

<PARAMETER PARAM TYPE="IN" PARAM CAPTION="RESULT SET"

PARAM DATA TYPE="STRING" PARAM NAME="RESULTSET" />

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="COLUMN POSITION FOR
TOPX" PARAM_DATA_TYPE="STRING" PARAM_NAME="TOPX_COLUMN" />
 </IN PARAMETERS>

- <OUT PARAMETERS>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT DATA"</pre>

PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT METADATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTMETADATA" />

</OUT_PARAMETERS>

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="AB2"

DIRECTIVE NAME="APPENDER" DIRECTIVE TYPE=""

THREADING_EFFECT="JOIN" DIRECTIVE_DESC="REJOIN SPLIT RESULTSETS" DIRECTIVE VENDOR="DPA" DIRECTIVE VERSION="1"

DIRECTIVE CATEGORY="DPA-MISC">

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET METADATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTMETADATA" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />
 </IN PARAMETERS>

FIG. 19C

1903

- <OUT PARAMETERS>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT DATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />
 <PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT METADATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTMETADATA" />
 </OUT_PARAMETERS>

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="MB1" DIRECTIVE_NAME="EMAIL RESULTS" THREADING_EFFECT="STANDARD" DIRECTIVE_TYPE="""
 DIRECTIVE_DESC="SIMPLE EMAIL DIRECTIVE" DIRECTIVE_VENDOR="DPA"
 DIRECTIVE_VERSION="1" DIRECTIVE_CATEGORY="DPA-MISC">
 <-DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
 PORT="9070" />
- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="EMAIL ADDRESS LIST"
PARAM_DATA_TYPE="STRING" PARAM_NAME="MAILADR" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="SUBJECT LINE"
PARAM_DATA_TYPE="STRING" PARAM_NAME="SUBJECT" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="MESSAGE DATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="MESSAGE" />
 </IN PARAMETERS>

<OUT PARAMETERS />

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="CRB1"
DIRECTIVE_NAME="CLEAR STORED RESULTS"
THREADING_EFFECT="STANDARD" DIRECTIVE_TYPE=""
DIRECTIVE_DESC="REMOVE PREVIOUS RESULT SETS FROM REPOSITORY"
DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1"

DIRECTIVE_CATEGORY="DPA-MISC">

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"

PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="OWNER ID"
PARAM_DATA_TYPE="STRING" PARAM_NAME="OWNERID" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULTNAME"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTNAME" />
 </IN_PARAMETERS>
 <OUT PARAMETERS />

</DF_DIRECTIVE_DEFINITION>

FIG. 19D

1904

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="CRC1" DIRECTIVE_NAME="CLEAR PUBLISHED PAGES" THREADING_EFFECT="STANDARD" DIRECTIVE_TYPE="" DIRECTIVE_DESC="REMOVE PREVIOUS PUBLISHED PAGES FROM REPOSITORY" DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1" DIRECTIVE_CATEGORY="DPA-MISC">

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="OWNERID"
PARAM_DATA_TYPE="STRING" PARAM_NAME="OWNERID" />
<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="PAGE NAME"
PARAM_DATA_TYPE="STRING" PARAM_NAME="PAGENAME" />

</IN PARAMETERS>

<OUT PARAMETERS />

</DF DIRECTIVE DEFINITION>

<DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4"
PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET OWNER"
PARAM_DATA_TYPE="STRING" PARAM_NAME="OWNER" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET METADATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTMETADATA" />
 <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="RESULT SET NAME"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTNAME" />
 </IN PARAMETERS>

- <OUT PARAMETERS>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULTSET ID"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSETID" />
</OUT_PARAMETERS>
</PRE>

</DF_DIRECTIVE_DEFINITION>

FIG. 19E

_1905

- <DF DIRECTIVE DEFINITION DIRECTIVE ID="CR2" DIRECTIVE NAME="PUBLISH PAGE" THREADING EFFECT="STANDARD" DIRECTIVE TYPE="" DIRECTIVE DESC="PUBLISHES PAGE & GRANTS SECURITY" DIRECTIVE VENDOR="DPA" DIRECTIVE VERSION="1" DIRECTIVE CATEGORY="DPA-MISC"> <DEPLOYMENT SERVICE="DPA DIRECTIVE MGR" MACHINE="SKUNKNT4"</p> PORT="9070" /> - <IN PARAMETERS> <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="GRANT SECURITY LIST" PARAM DATA TYPE="STRING" PARAM NAME="SECDOC" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="METADATA FOR SECDOC" PARAM DATA TYPE="STRING" PARAM NAME="SECMETA" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="GRANT SECURITY LIST" PARAM DATA TYPE="STRING" PARAM NAME="SECCOLNAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE OWNER"</pre> PARAM DATA TYPE="STRING" PARAM NAME="OWNER" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE NAME" PARAM DATA TYPE="STRING" PARAM NAME="PAGENAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE SLICE NAME" PARAM DATA TYPE="STRING" PARAM_NAME="PAGESLICENAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE DEFINITION" PARAM DATA TYPE="STRING" PARAM NAME="PAGEDEFN" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="IN RESULTS KEY" PARAM DATA TYPE="STRING" PARAM NAME="P1" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="IN RESULTS KEY" PARAM DATA TYPE="STRING" PARAM NAME="P2" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="IN RESULTS KEY" PARAM DATA TYPE="STRING" PARAM NAME="P3" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="IN RESULTS KEY" PARAM DATA TYPE="STRING" PARAM NAME="P4" /> <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="IN RESULTS KEY" PARAM DATA TYPE="STRING" PARAM NAME="P5" /> <PARAMETER PARAM TYPE="IN" PARAM_CAPTION="IN RESULTS KEY" PARAM_DATA_TYPE="STRING" PARAM_NAME="P6" /> </IN PARAMETERS>

FIG. 19F

1906

- <OUT PARAMETERS>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="PAGE ID"</pre> PARAM DATA TYPE="STRING" PARAM NAME="PAGEID" /> <PARAMETER PARAM TYPE="OUT" PARAM CAPTION="PAGE OWNER" PARAM DATA TYPE="STRING" PARAM NAME="OWNER" /> <PARAMETER PARAM TYPE="OUT" PARAM CAPTION="PAGE NAME"</p> PARAM DATA TYPE="STRING" PARAM NAME="PAGENAME" /> <PARAMETER PARAM TYPE="OUT" PARAM CAPTION="PAGE SLICE NAME"</p> PARAM DATA TYPE="STRING" PARAM_NAME="PAGESLICENAME" /> </OUT PARAMETERS>

</DF DIRECTIVE DEFINITION>

- <DF DIRECTIVE DEFINITION DIRECTIVE ID="DB3" DIRECTIVE_NAME="DATA</p> DIRECTIVE" THREADING EFFECT="STANDARD" DIRECTIVE DESC="RETRIEVE DATA AND ASSEMBLE INTO RESULT SET" DIRECTIVE VENDOR="DPA" DIRECTIVE VERSION="1" DIRECTIVE CATEGORY="DPA-MISC"> <DEPLOYMENT SERVICE="DPA DIRECTIVE MGR" MACHINE="SKUNKNT4"</p> PORT="9070" />

- <IN PARAMETERS>

<PARAMETER PARAM TYPE="IN" PARAM CAPTION="SQL" PARAM DATA TYPE="PARAMITERIZED SQL STRING" PARAM NAME="SQL" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="CONNECTION STRING" PARAM DATA TYPE="STRING" PARAM NAME="CONNECTION STRING" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="DATABASE USER NAME" PARAM DATA TYPE="STRING" PARAM NAME="USERNAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="DATABASE PASSWORD" PARAM DATA TYPE="STRING" PARAM NAME="PWD" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="P1" PARAM DATA_TYPE="STRING" PARAM NAME="P1" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="P2" PARAM DATA TYPE="STRING" PARAM NAME="P2" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="P3" PARAM DATA TYPE="STRING" PARAM NAME="P3" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="P4"</p> PARAM DATA TYPE="STRING" PARAM NAME="P4" /> <PARAMETER PARAM_TYPE="IN" PARAM_CAPTION="P5" PARAM DATA TYPE="STRING" PARAM NAME="P5" /> </IN PARAMETERS>

J S Ŋ U 4

FIG. 19G

1907

- < OUT PARAMETERS>

<PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT DATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTSET" />
 <PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULT METADATA"
PARAM_DATA_TYPE="STRING" PARAM_NAME="RESULTMETADATA" />
 </OUT_PARAMETERS>

</DF DIRECTIVE DEFINITION>

- <DF_DIRECTIVE_DEFINITION DIRECTIVE_ID="MB2" DIRECTIVE_NAME="SMTP EMAIL DIRECTIVE" THREADING_EFFECT="STANDARD" DIRECTIVE_TYPE=""DIRECTIVE_DESC="SEND PUBLISHED PAGES" DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1" DIRECTIVE_CATEGORY="DPA-MISC"> <DEPLOYMENT SERVICE="DPA_DIRECTIVE_MGR" MACHINE="SKUNKNT4" PORT="9070" />

- <IN_PARAMETERS>

<PARAMETER PARAM TYPE="IN" PARAM CAPTION="EMAIL ADDRESSES"</p> PARAM DATA TYPE="STRING" PARAM NAME="ADDRDOC" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="METADATA FOR ADDRDOC" PARAM DATA TYPE="STRING" PARAM NAME="ADDRMETA" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="EMAIL COLUMN NAME" PARAM DATA TYPE="STRING" PARAM NAME="ADDRCOLNAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="EMAIL COLUMN NAME"</p> PARAM DATA TYPE="STRING" PARAM NAME="IDCOLNAME" /> <PARAMETER PARAM_TYPE="IN" PARAM CAPTION="SUBJECT" PARAM DATA TYPE="STRING" PARAM NAME="SUBJECT" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE OWNER" PARAM DATA TYPE="STRING" PARAM NAME="OWNER" /> <PARAMETER PARAM TYPE="IN" PARAM_CAPTION="PAGE NAME" PARAM DATA TYPE="STRING" PARAM NAME="PAGENAME" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="PAGE INSTANCE" PARAM DATA TYPE="STRING" PARAM_NAME="PAGEINST" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="MAIL FORMAT" PARAM_DATA_TYPE="STRING" PARAM NAME="FORMAT" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="SEND FROM MAIL ADDRESS" PARAM DATA TYPE="STRING" PARAM NAME="SENDFROM" /> </IN_PARAMETERS>

FIG. 19H

PORT="9070" />

_1908

- <OUT PARAMETERS> <PARAMETER PARAM TYPE="OUT" PARAM CAPTION="ERROR MESSAGES" PARAM DATA TYPE="STRING" PARAM NAME="ERROR_MSG" /> </OUT PARAMETERS> </DF DIRECTIVE DEFINITION> - < DF DIRECTIVE DEFINITION DIRECTIVE ID="ABFILTER" DIRECTIVE NAME="ADVANCED FILTER" THREADING EFFECT="STANDARD" DIRECTIVE TYPE="" DIRECTIVE DESC="FILTER RESULTS" DIRECTIVE_VENDOR="DPA" DIRECTIVE_VERSION="1" DIRECTIVE_CATEGORY="DPA-MISC"> <DEPLOYMENT SERVICE="DPA DIRECTIVE MGR" MACHINE="SKUNKNT4"</p> PORT="9070" /> - <IN PARAMETERS> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="FILTER EXPRESSION" PARAM DATA TYPE="STRING" PARAM NAME="FILTER_EXP" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="RESULTS METADATA" PARAM DATA TYPE="STRING" PARAM NAME="METADOC" /> <PARAMETER PARAM_TYPE="IN" PARAM CAPTION="RESULTS" PARAM DATA TYPE="STRING" PARAM NAME="RESULTSDOC" /> </IN PARAMETERS> - <OUT PARAMETERS> <PARAMETER PARAM TYPE="OUT" PARAM CAPTION="RESULTS METADATA" PARAM DATA TYPE="STRING" PARAM NAME="METADOC" /> <PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="RESULTS" PARAM_DATA_TYPE="STRING" PARAM NAME="RESULTSDOC" /> <PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="ROW COUNT"</p> PARAM DATA TYPE="STRING" PARAM NAME="ROWCOUNT" /> </OUT PARAMETERS> </DF DIRECTIVE DEFINITION> - < DF DIRECTIVE DEFINITION DIRECTIVE ID="TEXTEMAILER" DIRECTIVE NAME="TEXT EMAILER" THREADING EFFECT="STANDARD" DIRECTIVE TYPE="" DIRECTIVE DESC="TEXT EMAILER" DIRECTIVE VENDOR="DPA" DIRECTIVE VERSION="1" DIRECTIVE CATEGORY="DPA-MISC"> <DEPLOYMENT SERVICE="DPA DIRECTIVE MGR" MACHINE="SKUNKNT4"</p>

FIG. 19I

1909

- <IN PARAMETERS> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="SUBJECT EXPRESSION"</p> PARAM DATA TYPE="STRING" PARAM NAME="SUBJECT EXP" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="MESSAGE EXPRESSION"</p> PARAM DATA TYPE="STRING" PARAM NAME="MESSAGE EXP" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="EMAIL ADDRESSES"</p> PARAM DATA TYPE="STRING" PARAM NAME="EMAIL ADDRESSES" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="SEND FROM ADDRESS"</p> PARAM DATA TYPE="STRING" PARAM NAME="FROM ADDRESS" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="RESULTS METADATA" PARAM DATA TYPE="STRING" PARAM NAME="METADOC" /> <PARAMETER PARAM TYPE="IN" PARAM CAPTION="RESULTS" PARAM DATA TYPE="STRING" PARAM NAME="RESULTSDOC" /> </IN PARAMETERS> - <OUT PARAMETERS> <PARAMETER PARAM_TYPE="OUT" PARAM_CAPTION="ERROR MESSAGES"</pre> PARAM DATA TYPE="STRING" PARAM NAME="ERROR" /> </OUT PARAMETERS> </DF DIRECTIVE DEFINITION> </DF DIRECTIVE DEFINITION LIST>

FIG. 20A

</FILTER>

2001

- <RESULTS DOC> - <DP QUERY DEF VERSION="1"> <DPA IDENTIFIERS DATA_SET="NW" WH_OWNER NAME="RROC" /> <HINTS /> - < COLUMN DEFS> <COLUMN DEF COLUMN SORT ATTRIBUTE="NONE" COLUMN TEXT="VENDOR NAME" TABLE ALIAS="VENDOR D" COLUMN NAME="VENDOR NAME" COLUMN ALIAS="VENDOR NAME" COLUMN SORT ORDER="1" COLUMN POSITION="1" COLUMN TYPE="GROUP BY" /> <COLUMN DEF COLUMN SORT ATTRIBUTE="NONE" COLUMN TEXT="PERIOD KEY" TABLE ALIAS="AP_INV_DETAIL_F" COLUMN NAME="PERIOD KEY" COLUMN ALIAS="PERIOD KEY" COLUMN SORT ORDER="2" COLUMN_POSITION="2" COLUMN TYPE="GROUP BY" /> <COLUMN_DEF COLUMN_SORT_ATTRIBUTE="DESC" COLUMN TEXT="SUM(AP INV DETAIL F.INVOICE LINE AMOUNT)" TABLE ALIAS="AP INV DETAIL F" COLUMN NAME="INVOICE LINE AMOUNT" COLUMN ALIAS="SUM INVOICE LINE AMOUNT" COLUMN SORT_ORDER="3" COLUMN POSITION="3" COLUMN_TYPE="AGGREGATE" /> </COLUMN DEFS> - <TABLE DEFS> <TABLE DEF TABLE ALIAS="AP INV DETAIL F" TABLE NAME="AP INV DETAIL F" /> <TABLE DEF TABLE ALIAS="VENDOR D" TABLE NAME="VENDOR D" / > </TABLE DEFS> - <DETAIL FILTERS> - <FILTER FILTER TYPE="VALUE" COLUMN TEXT="VENDOR TYPE" TABLE ALIAS="VENDOR D" FILTER PREC OPER="AND" FILTER OPERATOR="="> <FILTER VALUE VALUE DATA TYPE="STRING">EMPLOYEE/ FILTER VALUE>

FIG. 20B

2002

- <FILTER FILTER TYPE="VALUE" COLUMN TEXT="COMPANY KEY" TABLE_ALIAS="AP_INV_DETAIL_F" FILTER_PREC_OPER="AND" FILTER OPERATOR="="> <FILTER_VALUE VALUE_DATA_TYPE="STRING">01</FILTER_VALUE> </FILTER> </DETAIL FILTERS> - <AGGREGATE FILTERS> - <FILTER FILTER TYPE="VALUE" COLUMN TEXT="SUM(INVOICE LINE AMOUNT)" TABLE_ALIAS="AP_INV_DETAIL_F" FILTER PREC OPER="AND" FILTER OPERATOR=">"> <FILTER VALUE VALUE DATA TYPE="NUMBER">0</FILTER VALUE> </FILTER> </AGGREGATE FILTERS> </DP QUERY DEF> <DPA_QUERY_SERVER_INFO SERVICE="DPA_QUERY_SERVER"</p> MACHINE="EXH 2K" PORT="8069" WAREHOUSE_SERVER="HD.DPAPPLICATIONS.COM" WAREHOUSE DBNAME="DEMO30" WAREHOUSE OWNER="RROC">FOODADDY</ DPA_QUERY_SERVER_INFO> - < DP DS METADATA> <DP COLUMN COLUMN_NAME="VENDOR_NAME"</pre> COLUMN DATA TYPE="VARCHAR2" COLUMN DS ALIAS="C1" COLUMN TYPE="GROUP BY" COLUMN SORT ATTRIBUTE="NONE" COLUMN SOURCE ALIAS="VENDOR NAME" COLUMN LABEL="VENDOR NAME" COLUMN DESC="" COLUMN IS CURRENCY="N" /> <DP COLUMN COLUMN NAME="PERIOD KEY"</p> COLUMN DATA TYPE="VARCHAR2" COLUMN DS ALIAS="C2" COLUMN TYPE="GROUP BY" COLUMN SORT ATTRIBUTE="NONE" COLUMN_SOURCE_ALIAS="PERIOD KEY" COLUMN LABEL="PERIOD KEY" COLUMN DESC="" COLUMN IS CURRENCY="N" /> <DP COLUMN COLUMN NAME="SUM INVOICE LINE AMOUNT"</p> COLUMN DATA TYPE="NUMBER" COLUMN DS ALIAS="C3" COLUMN TYPE="AGGREGATE" COLUMN SORT ATTRIBUTE="DESC" COLUMN SOURCE ALIAS="SUM INVOICE LINE AMOUNT" COLUMN_LABEL="INVOICE LINE AMOUNT" COLUMN DESC="" COLUMN IS CURRENCY="Y" />

FIG. 20C

</DP_DS_METADATA>

- <DP_DS>

- <R>

<C1>JAMIE FROST</C1>

<C2>DEC-97</C2>

<C3>28159</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>JAN-98</C2>

<C3>15114.76</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>FEB-98</C2>

<C3>4417.86</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>APR-98</C2>

<C3>3439.10</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>DEC-97</C2>

<C3>3263</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>NOV-97</C2>

<C3>2907.85</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>FEB-98</C2>

<C3>2799.31</C3>

</R>

FIG. 20D

- <R>

<C1>KERRY JONES</C1>

<C2>MAY-98</C2>

<C3>2698.64</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>APR-98</C2>

<C3>2657.20</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>MAY-98</C2>

<C3>2549.68</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>MAR-98</C2>

<C3>2511.98</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>MAR-98</C2>

<C3>2459.87</C3>

</R>

- <R>

<C1>JAMIE FROST</C1>

<C2>JUN-98</C2>

<C3>2219.90</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>JUN-98</C2>

<C3>2182.29</C3>

</R>

- <R>

<C1>KERRY JONES</C1>

<C2>JAN-98</C2>

<C3>1516</C3>

</R>

FIG. 21R

2118

- <ACTIVITY NODE ID="152">

<ACTIVITY_HEADER ACTIVITY_NOTES="ACTIVITY NOTES"
ACTIVITY DESCRIPTION="ACTIVITY DESCRIPTION" />

<a color="beam: 100%; color: blue; color: bl

THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="DATA DIRECTIVE" DIRECTIVE_ID="DB3" DIRECTIVE_VERSION="1" DIRECTIVE_DESC="RETRIEVE DATA AND ASSEMBLE INTO RESULT SET" />

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="153" PARAM_DATA_TYPE="PARAMITERIZED SQL STRING" PARAM_CAPTION="SQL" PARAM_NAME="SQL" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="VALUE">SELECT USERNAME,EMAIL_ADDRESS FROM OA3.DF_QTYAPP_USERS</PARAM_SOURCE>
 - </PARAMETER>
- <PARAMETER NODE_ID="154" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="CONNECTION STRING" PARAM_NAME="CONNECTION_STRING" PARAM_TYPE="IN"> <PARAM_SOURCE
- PARAM_TYPE="VALUE">JDBC:ORACLE:THIN:@HD.DPAPPLICATIONS.COM:1521:N RB816</PARAM_SOURCE>
 - </PARAMETER>
- <PARAMETER NODE_ID="155" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USERNAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">OA3</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="156" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="PWD" PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">OA3</param_SOURCE>
- <PARAMETER NODE_ID="158" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P2" PARAM_NAME="P2" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="159" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="P3" PARAM_NAME="P3" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE> </PARAMETER>

FIG. 21A

2101

- <DF WORKFLOW VERSION="1">

<DF_WORKFLOW_HEADER DF_EDITOR_MAX_ID="172" FLOW_NAME="QTY
ANALYSIS" FLOW_DESCRIPTION="QTY ANALYSIS FLOW" FLOW_STATUS="FLOW
STATUS" FLOW_NOTES="" FLOW_AUTHOR="FLOW AUTHOR" />

- < DF WORKFLOW PARAMETERS>

- <PARAMETER NODE_ID="13" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="CONNECT STRING" PARAM_NAME="CONNECT_STRING"
PARAM_TYPE="OUT">

<PARAM SOURCE

PARAM_TYPE="VALUE">JDBC:ORACLE:THIN:@172.16.1.34:1521:DEMO30</P>

</PARAMETER>

- <PARAMETER NODE_ID="14" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USER_NAME"
PARAM_TYPE="OUT">

<PARAM_SOURCE PARAM_TYPE="VALUE">RROC609</PARAM_SOURCE>

- <PARAMETER NODE_ID="15" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="USER_PWD"
PARAM_TYPE="OUT">

<PARAM_SOURCE PARAM_TYPE="VALUE">DPA</PARAM_SOURCE> </PARAMETER>

- <PARAMETER NODE_ID="16" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="OWNERNAME" PARAM_NAME="OWNERNAME"
PARAM TYPE="OUT">

<PARAM_SOURCE PARAM_TYPE="VALUE">QTY_ANALYSIS</PARAM_SOURCE> </PARAMETER>

- <PARAMETER NODE_ID="17" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="CURRENT PERIOD" PARAM_NAME="CURRPERIOD"
PARAM_TYPE="OUT">

<PARAM_SOURCE PARAM_TYPE="VALUE">(1997-09) SEP-97</PARAM_SOURCE>

</PARAMETER>

</DF WORKFLOW_PARAMETERS>

- <DF WORKFLOW ACTIVITIES>

- <ACTIVITY NODE ID="11">

<activity header activity notes="activity notes"

ACTIVITY_DESCRIPTION="ACTIVITY DESCRIPTION" />

<ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
DIRECTIVE_NAME="SCHEDULER" THREADING_EFFECT="SPLIT"
DIRECTIVE_ID="SB1" DIRECTIVE_VERSION="1" DIRECTIVE_DESC="SCHEDULE
DIRECTIVE" />

FIG. 21B

2102

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="12" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="FREQUENCY" PARAM_NAME="FREQUENCY"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">0</PARAM_SOURCE>
 - </PARAMETER>
 - </ACTIVITY IN PARAMETERS>
 - <activity_out_parameters />
 - </ACTIVITY>
- <ACTIVITY NODE ID="18">
- <ACTIVITY HEADER ACTIVITY NOTES="ACTIVITY NOTES"</p>

ACTIVITY_DESCRIPTION="ACTIVITY DESCRIPTION" />

<ACTIVITY IMPLEMENTATION DIRECTIVE_VENDOR="DPA"</p>

DIRECTIVE_NAME="CLEAR STORED RESULTS"

THREADING_EFFECT="STANDARD" DIRECTIVE_ID="CRB1" DIRECTIVE_TYPE=""DIRECTIVE_VERSION="1" DIRECTIVE_DESC="REMOVE PREVIOUS RESULT SETS FROM REPOSITORY" />

- <ACTIVITY IN PARAMETERS>
- ~ < PARAMETER NODE ID="19" PARAM DATA TYPE="STRING"

PARAM_CAPTION="OWNER ID" PARAM_NAME="OWNERID" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="ID">16</PARAM_SOURCE>

- </PARAMETER>
- <PARAMETER NODE_ID="20" PARAM_DATA_TYPE="STRING"

PARAM_CAPTION="RESULTNAME" PARAM_NAME="RESULTNAME"

PARAM TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE">*</PARAM_SOURCE>

- </PARAMETER>
- </ACTIVITY IN PARAMETERS>
- <activity out parameters />
- </ACTIVITY>
- <ACTIVITY NODE ID="21">

<ACTIVITY HEADER ACTIVITY NOTES="ACTIVITY NOTES"</p>

ACTIVITY DESCRIPTION="ACTIVITY DESCRIPTION" />

<ACTIVITY IMPLEMENTATION DIRECTIVE VENDOR="DPA"</p>

DIRECTIVE NAME="CLEAR PUBLISHED PAGES"

THREADING_EFFECT="STANDARD" DIRECTIVE_ID="CRC1" DIRECTIVE_TYPE=""DIRECTIVE_VERSION="1" DIRECTIVE_DESC="REMOVE PREVIOUS PUBLISHED PAGES FROM REPOSITORY" />

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="22" PARAM DATA TYPE="STRING"

</PARAMETER>

Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 74 of 103

FIG. 21C

2103

- <PARAMETER NODE ID="23" PARAM DATA TYPE="STRING" PARAM CAPTION="PAGE NAME" PARAM NAME="PAGENAME" PARAM TYPE="IN"> <PARAM SOURCE PARAM TYPE="VALUE">*</PARAM_SOURCE> </PARAMETER> </ACTIVITY IN PARAMETERS> <ACTIVITY OUT PARAMETERS /> </ACTIVITY> - <ACTIVITY NODE ID="26"> <activity header activity notes="activity notes" ACTIVITY DESCRIPTION="DETAIL QUERY" /> <ACTIVITY IMPLEMENTATION DIRECTIVE VENDOR="DPA"</p> DIRECTIVE NAME="DATA DIRECTIVE" THREADING EFFECT="STANDARD" DIRECTIVE ID="DB3" DIRECTIVE VERSION="1" DIRECTIVE DESC="RETRIEVE DATA AND ASSEMBLE INTO RESULT SET" /> - <ACTIVITY IN PARAMETERS> - <PARAMETER NODE ID="27" PARAM DATA TYPE="PARAMITERIZED SQL STRING" PARAM CAPTION="SQL" PARAM NAME="SQL" PARAM TYPE="IN"> <PARAM SOURCE PARAM TYPE="VALUE">SELECT NW COMPONENT ITEM D.COMPONENT ITEM DESC COMPONENT ITEM DESC, SUM(NW DISC SHORTAGE F. QUANTITY ISSUED) QUANTITY ISSUED, SUM(NW DISC SHORTAGE F.QUANTITY ON HAND) QUANTITY ON HAND, SUM(NW DISC SHORTAGE F.QUANTITY SHORT) QUANTITY SHORT, SUM(NW DISC_SHORTAGE_F.REQUIRED_QUANTITY) REQUIRED QUANTITY FROM NW COMPONENT ITEM D 0 NW COMPONENT ITEM D,NW DISC SHORTAGE F 0 NW DISC SHORTAGE F,NW ORG PERIOD D 0 NW ORG PERIOD D, NW WIP ENTITY D 0 NW WIP ENTITY D WHERE NW DISC SHORTAGE F.COMPONENT ITEM KEY = NW COMPONENT ITEM D.COMPONENT ITEM KEY AND NW DISC SHORTAGE F.ORG PERIOD KEY = NW ORG PERIOD D.ORG PERIOD KEY AND NW DISC SHORTAGE F.WIP_ENTITY_KEY =NW WIP ENTITY D.WIP ENTITY KEY AND NW ORG PERIOD D.ORG PERIOD = '#P1#' GROUP BY NW COMPONENT ITEM D.COMPONENT ITEM DESC HAVING SUM(NW DISC SHORTAGE F.REQUIRED QUANTITY) > 0 ORDER BY REQUIRED QUANTITY DESC, COMPONENT_ITEM_DESC, REQUIRED_QUANTITY, QUANTITY ISSUED, QUANTITY SHORT, QUANTITY ON HAND</ PARAM SOURCE> </PARAMETER>

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FIG. 21D

- <PARAMETER NODE_ID="28" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="CONNECTION STRING"
 PARAM_NAME="CONNECTION_STRING" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="29" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USERNAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">14</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="30" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="PWD"
 PARAM_TYPE="IN">
 PARAM_SOURCE DARAM_TYPE="ID">15</PARAM_SOURCE>
 - <PARAM_SOURCE PARAM_TYPE="ID">15</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="31" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P1" PARAM_NAME="P1" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">17</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="32" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P2" PARAM_NAME="P2" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="33" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P3" PARAM_NAME="P3" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="34" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P4" PARAM_NAME="P4" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="35" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P5" PARAM_NAME="P5" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
 </ACTIVITY_IN_PARAMETERS>

FIG. 21E

2105

- <ACTIVITY OUT PARAMETERS>

- <PARAMETER NODE_ID="36" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="RESULT DATA" PARAM_NAME="RESULTSET"
PARAM_TYPE="OUT">

<PARAM SOURCE />

</PARAMETER>

- <PARAMETER NODE_ID="37" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="RESULT METADATA" PARAM_NAME="RESULTMETADATA"
PARAM TYPE="OUT">

<PARAM SOURCE />

</PARAMETER>

</ACTIVITY_OUT_PARAMETERS>

</ACTIVITY>

- <ACTIVITY NODE ID="39">

<activity header activity notes="activity notes"

ACTIVITY DESCRIPTION="TREND QUERY" />

<activity implementation directive vendor="dpa"

DIRECTIVE_NAME="DATA DIRECTIVE" THREADING_EFFECT="STANDARD"
DIRECTIVE_ID="DB3" DIRECTIVE_VERSION="1" DIRECTIVE_DESC="RETRIEVE
DATA AND ASSEMBLE INTO RESULT SET" />

- <ACTIVITY_IN_PARAMETERS>

- <PARAMETER NODE_ID="40" PARAM_DATA_TYPE="PARAMITERIZED SQL
STRING" PARAM_CAPTION="SQL" PARAM_NAME="SQL" PARAM_TYPE="IN">
 <PARAM SOURCE PARAM TYPE="VALUE">SELECT

NW ORG PERIOD D.ORG PERIOD

PERIOD NAME, SUM(NW DISC SHORTAGE F.QUANTITY ISSUED)

QUANTITY ISSUED, SUM(NW DISC SHORTAGE F.QUANTITY ON HAND)

QUANTITY ON HAND, SUM(NW DISC SHORTAGE F.QUANTITY SHORT)

QUANTITY SHORT, SUM(NW DISC SHORTAGE F. REQUIRED QUANTITY)

REQUIRED QUANTITY FROM NW DISC SHORTAGE F 0

NW_DISC_SHORTAGE_F, NW_ORG_PERIOD_D_0 NW_ORG_PERIOD_D WHERE NW DISC SHORTAGE F.ORG PERIOD KEY =

NW ORG PERIOD D.ORG PERIOD_KEY GROUP BY

NW_ORG_PERIOD_D.ORG_PERIOD ORDER BY PERIOD_NAME DESC</

PARAM SOURCE>

</PARAMETER>

- <PARAMETER NODE_ID="41" PARAM_DATA_TYPE="STRING"</p>

PARAM CAPTION="CONNECTION STRING"

PARAM NAME="CONNECTION_STRING" PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>

</PARAMETER>

FIG. 21F

- <PARAMETER NODE_ID="42" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USERNAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">14</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="43" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="PWD"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">15</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="44" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P1" PARAM_NAME="P1" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">17</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="45" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P2" PARAM_NAME="P2" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="46" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P3" PARAM_NAME="P3" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="47" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P4" PARAM_NAME="P4" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="48" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P5" PARAM_NAME="P5" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
 - </ACTIVITY IN PARAMETERS>
- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="49" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT DATA" PARAM_NAME="RESULTSET"
 PARAM TYPE="OUT">
- <PARAM SOURCE />
- </PARAMETER>
- <PARAMETER NODE_ID="50" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT METADATA" PARAM_NAME="RESULTMETADATA"
 PARAM_TYPE="OUT">
 - <PARAM SOURCE />
 - </PARAMETER>
 - </ACTIVITY_OUT_PARAMETERS>
 - </ACTIVITY>

FIG. 21G

2107

- <ACTIVITY NODE ID="52">

<ACTIVITY_HEADER ACTIVITY_NOTES="ACTIVITY NOTES"
ACTIVITY_DESCRIPTION="SUMMARY QUERY" />

<ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
DIRECTIVE_NAME="DATA DIRECTIVE" THREADING_EFFECT="STANDARD"
DIRECTIVE_ID="DB3" DIRECTIVE_VERSION="1" DIRECTIVE_DESC="RETRIEVE"
DATA AND ASSEMBLE INTO RESULT SET" />

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="53" PARAM_DATA_TYPE="PARAMITERIZED SQL STRING" PARAM_CAPTION="SQL" PARAM_NAME="SQL" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="VALUE">SELECT

NW COMPONENT ITEM D.COMPONENT ITEM DESC

COMPONENT_ITEM_DESC,SUM(NW_DISC_SHORTAGE_F.QUANTITY_ISSUED)

QUANTITY_ISSUED,SUM(NW_DISC_SHORTAGE_F.QUANTITY_ON_HAND)

QUANTITY_ON_HAND,SUM(NW_DISC_SHORTAGE_F.QUANTITY_SHORT)

QUANTITY_SHORT,SUM(NW_DISC_SHORTAGE_F.REQUIRED_QUANTITY)

REQUIRED_QUANTITY FROM NW_COMPONENT_ITEM_D_0

NW_COMPONENT_ITEM_D,NW_DISC_SHORTAGE_F_0

NW_DISC_SHORTAGE_F,NW_ORG_PERIOD_D_0

NW_ORG_PERIOD_D,NW_WIP_ENTITY_D_0 NW_WIP_ENTITY_D WHERE

NW_DISC_SHORTAGE_F.COMPONENT_ITEM_KEY =

NW COMPONENT ITEM D.COMPONENT ITEM KEY AND

NW DISC SHORTAGE_F.ORG_PERIOD_KEY =

NW_ORG_PERIOD_D.ORG_PERIOD_KEY AND

NW DISC SHORTAGE F.WIP ENTITY KEY

=NW_WIP_ENTITY_D.WIP_ENTITY_KEY AND NW_ORG_PERIOD_D.ORG_PERIOD
= '#P1#' GROUP BY NW_COMPONENT_ITEM_D.COMPONENT_ITEM_DESC
HAVING SUM(NW_DISC_SHORTAGE_F.REQUIRED_QUANTITY) > 0 ORDER BY
REQUIRED_QUANTITY_DESC, COMPONENT_ITEM_DESC,REQUIRED_QUANTITY,
QUANTITY_ISSUED, QUANTITY_SHORT, QUANTITY_ON_HAND</
PARAM_SOURCE>

</PARAMETER>

- <PARAMETER NODE_ID="54" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="CONNECTION STRING"

PARAM_NAME="CONNECTION_STRING" PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>

</PARAMETER>

- <PARAMETER NODE_ID="55" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USERNAME"
PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="ID">14</PARAM_SOURCE>

FIG. 21H

- <PARAMETER NODE_ID="56" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="PWD"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">15</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="57" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P1" PARAM_NAME="P1" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">17</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="58" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P2" PARAM_NAME="P2" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="59" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P3" PARAM_NAME="P3" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="60" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P4" PARAM_NAME="P4" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="61" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P5" PARAM_NAME="P5" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
 - </ACTIVITY IN PARAMETERS>
- <ACTIVITY_OUT_PARAMETERS>
- <PARAMETER NODE_ID="62" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT DATA" PARAM_NAME="RESULTSET"
 PARAM_TYPE="OUT">
- <PARAM_SOURCE />
- </PARAMETER>
- <PARAMETER NODE_ID="63" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT METADATA" PARAM_NAME="RESULTMETADATA"
 PARAM_TYPE="OUT">
- <PARAM SOURCE />
- </PARAMETER>
- </ACTIVITY_OUT_PARAMETERS>
- </ACTIVITY>

FIG. 21I

2109

- <ACTIVITY NODE ID="65">

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="66" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET OWNER" PARAM_NAME="OWNER"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="ID">16</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="67" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="RESULT SET" PARAM_NAME="RESULTSET" PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">36</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="68" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET METADATA"
 PARAM_NAME="RESULTMETADATA" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">37</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="69" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET NAME" PARAM_NAME="RESULTNAME"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">DETAIL</PARAM_SOURCE> </PARAMETER>
- </ACTIVITY IN PARAMETERS>
- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="70" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULTSET ID" PARAM_NAME="RESULTSETID"
 PARAM_TYPE="OUT">
 - <PARAM SOURCE />
 - </PARAMETER>
 - </ACTIVITY_OUT_PARAMETERS>
 - </ACTIVITY>
- <ACTIVITY NODE ID="72">
 - <activity_header activity_notes="activity notes"

ACTIVITY_DESCRIPTION="ACTIVITY DESCRIPTION" />

<ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="SAVE RESULTS"
DIRECTIVE ID="SR1" DIRECTIVE TYPE="" DIRECTIVE VERSION="1"</pre>

DIRECTIVE_DESC="SAVES RESULTS TO REPOSITORY" />

FIG. 21J

2110

- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="73" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET OWNER" PARAM_NAME="OWNER"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">16</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="74" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET" PARAM_NAME="RESULTSET"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="ID">49</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="75" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET METADATA"
 PARAM_NAME="RESULTMETADATA" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">50</PARAM_SOURCE>
- <PARAMETER NODE_ID="76" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET NAME" PARAM_NAME="RESULTNAME"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">TREND</PARAM_SOURCE>
 </PARAMETER>
- </ACTIVITY IN PARAMETERS>
- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="77" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULTSET ID" PARAM_NAME="RESULTSETID"
 PARAM_TYPE="OUT">
 - <PARAM_SOURCE />
 - </PARAMETER>

</PARAMETER>

- </ACTIVITY OUT PARAMETERS>
- </ACTIVITY>
- <ACTIVITY NODE ID="79">
- <ACTIVITY HEADER ACTIVITY NOTES="ACTIVITY NOTES"</p>

ACTIVITY DESCRIPTION="ACTIVITY DESCRIPTION" />

- <ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
 THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="SAVE RESULTS"
 DIRECTIVE_ID="SR1" DIRECTIVE_TYPE="" DIRECTIVE_VERSION="1"
 DIRECTIVE DESC="SAVES RESULTS TO REPOSITORY" />
- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="80" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET OWNER" PARAM_NAME="OWNER"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">16</PARAM_SOURCE> </PARAMETER>

FIG. 21K

2111

- <PARAMETER NODE_ID="81" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET" PARAM_NAME="RESULTSET" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">62</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="82" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET METADATA" PARAM_NAME="RESULTMETADATA"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">63</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="83" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT SET NAME" PARAM_NAME="RESULTNAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">SUMMARY
 - </ACTIVITY_IN_PARAMETERS>
- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="84" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULTSET ID" PARAM_NAME="RESULTSETID"
 PARAM_TYPE="OUT">
 - <PARAM SOURCE />
 - </PARAMETER>
- </ACTIVITY_OUT_PARAMETERS>
- </ACTIVITY>
- <ACTIVITY NODE ID="87">
- <ACTIVITY HEADER ACTIVITY NOTES="ACTIVITY NOTES"</p>

ACTIVITY DESCRIPTION="ACTIVITY DESCRIPTION" />

- <ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
 THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="PUBLISH PAGE"
 DIRECTIVE_ID="CR2" DIRECTIVE_TYPE="" DIRECTIVE_VERSION="1"
 DIRECTIVE_DESC="PUBLISHES PAGE & GRANTS SECURITY" />
- <ACTIVITY IN PARAMETERS>
- <PARAMETER NODE_ID="88" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="GRANT SECURITY LIST" PARAM_NAME="SECDOC"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="ID">162</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="89" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="METADATA FOR SECDOC" PARAM_NAME="SECMETA"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">163</PARAM_SOURCE> </PARAMETER>

.2112

FIG. 21L

- <PARAMETER NODE_ID="90" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="GRANT SECURITY LIST" PARAM_NAME="SECCOLNAME" PARAM_TYPE="IN">

- <PARAM_SOURCE PARAM_TYPE="VALUE">USERNAME</PARAM_SOURCE>
- <PARAMETER NODE_ID="91" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE OWNER" PARAM_NAME="OWNER" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">16</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="92" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="PAGE NAME" PARAM_NAME="PAGENAME" PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">STARTPAGE</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="93" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE SLICE NAME" PARAM_NAME="PAGESLICENAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">FIRST</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="94" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE DEFINITION" PARAM_NAME="PAGEDEFN"
 PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE"><DP_PAGE_DEF><LAYER
LAYER_TYPE="HORIZONTAL" LAYER_BORDER="0" LAYER_PADDING="3"
LAYER_HEIGHT="100%" LAYER_WIDTH="100%"><LAYER
LAYER_TYPE="VERTICAL" LAYER_PADDING="3" LAYER_BORDER="0"
LAYER_HEIGHT="225" LAYER_WIDTH="100%"><LAYER_LAYER_TYPE="WILL"</pre>

LAYER_HEIGHT="225" LAYER_WIDTH="100%"><LAYER LAYER_TYPE="WIDGET" LAYER HEIGHT="100%" LAYER_WIDTH="50%"><WIDGET

WIDGET ID="DP PIE CHART"><PARAMETERS><PARAM

PARAM_NAME="TITLE">MY PIE</PARAM><PARAM_NAME="DSID">#P3#</

PARAM><PARAM PARAM_NAME="VALUECOL">REQUIRED_QUANTITY</

PARAM><PARAM PARAM_NAME="LABELCOL">COMPONENT_ITEM_DESC</PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM><PARAM>

PARAM><PARAM_NAME="FILTERTYPE">TOP</PARAM><PARAM
PARAM NAME="FILTERVAL">10</PARAM></PARAMETERS></WIDGET></

LAYER><LAYER LAYER TYPE="WIDGET" LAYER HEIGHT="100%"

LAYER WIDTH="50%"><WIDGET

WIDGET ID="DP BAR CHART2"><PARAMETERS><PARAM

PARAM NAME="TITLE">MY CHART TITLE</PARAM><PARAM

PARAM NAME="DSID">#P2#</PARAM><PARAM

PARAM_NAME="MEASURECOLS">QUANTITY_ON_HAND|QUANTITY_ISSUED|QUA

NTITY_SHORT|REQUIRED_QUANTITY</PARAM><PARAM

PARAM NAME="XAXISLABELS">ON HAND[ISSUED|SHORT|REQUIRED</

PARAM><PARAM PARAM NAME="SERIESCOL">PERIOD NAME</PARAM></

PARAMETERS></WIDGET></LAYER></LAYER>

LAYER TYPE="HORIZONTAL" LAYER_BORDER="0" LAYER_PADDING="3"

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FIG. 21M

2113

LAYER_HEIGHT="80%" LAYER_WIDTH="100%"><LAYER_LAYER_TYPE="WIDGET"
LAYER_HEIGHT="100%" LAYER_WIDTH="100%"><WIDGET
WIDGET_ID="DP_REPORT_VIEWER"><PARAMETERS><PARAM
PARAM_NAME="TITLE">MY TITLE</PARAM> <PARAM
PARAM_NAME="DSID">#P1#</PARAM></PARAMETERS></WIDGET></LAYER></LAYER></LAYER></LAYER></PARAM_SOURCE>
</PARAMETER>

- <PARAMETER NODE_ID="95" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P1" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">70</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="96" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P2" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">77</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="97" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P3" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">84</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="98" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P4" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">70</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="99" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P5" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">70</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="100" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="IN RESULTS KEY" PARAM_NAME="P6" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">70</PARAM_SOURCE>
 </PARAMETER>
 </ACTIVITY IN PARAMETERS>
- <ACTIVITY_OUT_PARAMETERS>
- <PARAMETER NODE_ID="101" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE ID" PARAM_NAME="PAGEID" PARAM_TYPE="OUT">
 <PARAM_SOURCE />
 - </PARAMETER>
- <PARAMETER NODE_ID="102" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="PAGE OWNER" PARAM_NAME="OWNER" PARAM_TYPE="OUT"> <PARAM_SOURCE />

</PARAMETER>

<PARAM_SOURCE />
</PARAMETER>

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FIG. 21N 2114 - <PARAMETER NODE ID="103" PARAM DATA TYPE="STRING" PARAM CAPTION="PAGE NAME" PARAM NAME="PAGENAME" PARAM TYPE="OUT"> <PARAM SOURCE /> </PARAMETER> - <PARAMETER NODE ID="104" PARAM DATA TYPE="STRING" PARAM CAPTION="PAGE SLICE NAME" PARAM NAME="PAGESLICENAME" PARAM TYPE="OUT"> <PARAM SOURCE /> </PARAMETER> </ACTIVITY OUT PARAMETERS> </ACTIVITY> - <ACTIVITY NODE ID="108"> <activity_header activity_notes="activity notes" ACTIVITY DESCRIPTION="OUTOF BOUNDS QTY" /> <ACTIVITY IMPLEMENTATION DIRECTIVE VENDOR="DPA"</p> THREADING EFFECT="STANDARD" DIRECTIVE NAME="ADVANCED FILTER" DIRECTIVE ID="ABFILTER" DIRECTIVE TYPE="" DIRECTIVE VERSION="1" DIRECTIVE DESC="FILTER RESULTS" /> - <ACTIVITY IN PARAMETERS> - <PARAMETER NODE ID="109" PARAM DATA TYPE="STRING"</p> PARAM CAPTION="FILTER EXPRESSION" PARAM NAME="FILTER EXP" PARAM TYPE="IN"> <PARAM SOURCE PARAM TYPE="VALUE">#REQUIRED QUANTITY# > 200 PARAM SOURCE> </PARAMETER> - <PARAMETER NODE ID="110" PARAM DATA TYPE="STRING" PARAM CAPTION="RESULTS METADATA" PARAM NAME="METADOC" PARAM TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="ID">63</PARAM_SOURCE> </PARAMETER> - <PARAMETER NODE ID="111" PARAM DATA TYPE="STRING" PARAM CAPTION="RESULTS" PARAM NAME="RESULTSDOC" PARAM TYPE="IN"> <PARAM SOURCE PARAM TYPE="ID">62</PARAM SOURCE> </PARAMETER> </ACTIVITY IN PARAMETERS> - <ACTIVITY OUT PARAMETERS> - <PARAMETER NODE ID="112" PARAM DATA TYPE="STRING" PARAM CAPTION="RESULTS METADATA" PARAM NAME="METADOC" PARAM TYPE="OUT">

FIG. 210

2115

- <PARAMETER NODE_ID="113" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="RESULTS" PARAM_NAME="RESULTSDOC"
PARAM_TYPE="OUT">

<PARAM SOURCE />

</PARAMETER>

- <PARAMETER NODE_ID="114" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="ROW COUNT" PARAM_NAME="ROWCOUNT" PARAM_TYPE="OUT">

<PARAM SOURCE />

</PARAMETER>

</ACTIVITY OUT PARAMETERS>

</ACTIVITY>

- <ACTIVITY NODE ID="116">

<activity header activity notes="activity notes"

ACTIVITY DESCRIPTION="ACTIVITY DESCRIPTION" />

<ACTIVITY IMPLEMENTATION DIRECTIVE VENDOR="DPA"</p>

THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="TEXT EMAILER"
DIRECTIVE_ID="TEXTEMAILER" DIRECTIVE_TYPE="" DIRECTIVE_VERSION="1"
DIRECTIVE DESC="TEXT EMAILER" />

- <ACTIVITY IN PARAMETERS>

- <PARAMETER NODE_ID="117" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="SUBJECT_EXPRESSION" PARAM_NAME="SUBJECT_EXP"
PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE">OUT OF BOUNDS QTY CONDITION

</PARAMETER>

- <PARAMETER NODE_ID="118" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="MESSAGE EXPRESSION" PARAM_NAME="MESSAGE_EXP"
PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE">COMPONENT:

#COMPONENT_ITEM_DESC# REQUIRES #REQUIRED_QUANTITY# ADDITIONAL UNITS</PARAM SOURCE>

</PARAMETER>

- <PARAMETER NODE_ID="119" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="EMAIL ADDRESSES" PARAM_NAME="EMAIL_ADDRESSES"
PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE">EXH@DPAPPLICATIONS.COM</PARAM_SOURCE>

</PARAMETER>

- <PARAMETER NODE_ID="120" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="SEND FROM ADDRESS" PARAM_NAME="FROM_ADDRESS"
PARAM_TYPE="IN">

<PARAM_SOURCE PARAM_TYPE="VALUE">DF@DPAPPLICATIONS.COM</PARAM_SOURCE>

</PARAMETER>

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FIG. 21P

2116

- <PARAMETER NODE_ID="121" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULTS METADATA" PARAM_NAME="METADOC"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="ID">112</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="122" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULTS" PARAM_NAME="RESULTSDOC" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">113</PARAM_SOURCE>
 </PARAMETER>
 - </ACTIVITY IN PARAMETERS>
- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="123" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="ERROR MESSAGES" PARAM_NAME="ERROR" PARAM_TYPE="OUT">
 - <PARAM SOURCE />
 - </PARAMETER>
- </ACTIVITY OUT PARAMETERS>
- </ACTIVITY>
- <ACTIVITY NODE ID="125">
- <activity_header activity_notes="activity notes"

ACTIVITY DESCRIPTION="EMAIL LINK" />

<ACTIVITY_IMPLEMENTATION DIRECTIVE_VENDOR="DPA"
THREADING_EFFECT="STANDARD" DIRECTIVE_NAME="SMTP EMAIL DIRECTIVE"
DIRECTIVE ID="MB2" DIRECTIVE TYPE="" DIRECTIVE VERSION="1"</pre>

DIRECTIVE_DESC="SEND PUBLISHED PAGES" />

- <ACTIVITY_IN_PARAMETERS>
- <PARAMETER NODE_ID="126" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="EMAIL ADDRESSES" PARAM_NAME="ADDRDOC"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="ID">162</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="127" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="METADATA FOR ADDRDOC" PARAM_NAME="ADDRMETA"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">163</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="128" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="EMAIL COLUMN NAME" PARAM_NAME="ADDRCOLNAME"
 PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="VALUE">EMAIL_ADDRESS

FIG. 21Q

- <PARAMETER NODE_ID="129" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="EMAIL COLUMN NAME" PARAM_NAME="IDCOLNAME"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">USERNAME</PARAM_SOURCE>
- <PARAMETER NODE_ID="130" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="SUBJECT" PARAM_NAME="SUBJECT" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="VALUE">QTY ANALYSIS UPDATED</P>
 PARAM_SOURCE>
 - </PARAMETER NODE ID="1"
- <PARAMETER NODE_ID="131" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE OWNER" PARAM_NAME="OWNER" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">102</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="132" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="PAGE NAME" PARAM_NAME="PAGENAME" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">103</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="133" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="PAGE INSTANCE" PARAM_NAME="PAGEINST" PARAM_TYPE="IN">
 - <PARAM_SOURCE PARAM_TYPE="ID">104</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="135" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="SEND FROM MAIL ADDRESS" PARAM_NAME="SENDFROM"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">DF@DPAPPLICATIONS.COM
- </PARAMETER>
- </ACTIVITY IN PARAMETERS>
- <ACTIVITY_OUT_PARAMETERS>
- <PARAMETER NODE_ID="136" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="ERROR MESSAGES" PARAM_NAME="ERROR_MSG"
 PARAM TYPE="OUT">
- <PARAM SOURCE />
- </PARAMETER>
- </ACTIVITY_OUT_PARAMETERS>
- </ACTIVITY>

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FIG. 21R

- <ACTIVITY NODE ID="152">

- <ACTIVITY_IN_PARAMETERS>
- <PARAMETER NODE_ID="153" PARAM_DATA_TYPE="PARAMITERIZED SQL STRING" PARAM_CAPTION="SQL" PARAM_NAME="SQL" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="VALUE">SELECT USERNAME,EMAIL_ADDRESS FROM OA3.DF_QTYAPP_USERS</ PARAM_SOURCE>
 - </PARAMETER>
- <PARAMETER NODE_ID="154" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="CONNECTION STRING" PARAM_NAME="CONNECTION_STRING" PARAM_TYPE="IN"> <PARAM_SOURCE

PARAM_TYPE="VALUE">JDBC:ORACLE:THIN:@HD.DPAPPLICATIONS.COM:1521:N RB816</PARAM_SOURCE>

- </PARAMETER>
- <PARAMETER NODE_ID="155" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE USER NAME" PARAM_NAME="USERNAME"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">OA3</PARAM_SOURCE>
- <PARAMETER NODE_ID="156" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="DATABASE PASSWORD" PARAM_NAME="PWD"
 PARAM_TYPE="IN">
- <PARAM_SOURCE PARAM_TYPE="VALUE">OA3</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="157" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P1" PARAM_NAME="P1" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>
- <PARAMETER NODE_ID="158" PARAM_DATA_TYPE="STRING" PARAM_CAPTION="P2" PARAM_NAME="P2" PARAM_TYPE="IN"> <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE> </PARAMETER>
- <PARAMETER NODE_ID="159" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="P3" PARAM_NAME="P3" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>

FIG. 21S

- <PARAMETER NODE_ID="160" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="P4" PARAM_NAME="P4" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>

- <PARAMETER NODE_ID="161" PARAM_DATA_TYPE="STRING"
PARAM_CAPTION="P5" PARAM_NAME="P5" PARAM_TYPE="IN">
 <PARAM_SOURCE PARAM_TYPE="ID">13</PARAM_SOURCE>
 </PARAMETER>

</ACTIVITY_IN_PARAMETERS>

- <ACTIVITY OUT PARAMETERS>
- <PARAMETER NODE_ID="162" PARAM_DATA_TYPE="STRING"PARAM_CAPTION="RESULT DATA" PARAM_NAME="RESULTSET"PARAM_TYPE="OUT">
- <PARAM SOURCE />
- </PARAMETER>
- <PARAMETER NODE_ID="163" PARAM_DATA_TYPE="STRING"
 PARAM_CAPTION="RESULT METADATA" PARAM_NAME="RESULTMETADATA"
 PARAM_TYPE="OUT">
 - <PARAM SOURCE />
 - </PARAMETER>
 - </ACTIVITY OUT PARAMETERS>
 - </ACTIVITY>
 - </DF WORKFLOW ACTIVITIES>
- <DF WORKFLOW TRANSITIONS>

<TRANSITION NODE_ID="24" FROM ACTIVITY ID="11" TO ACTIVITY ID="18"</pre> TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="25" FROM ACTIVITY ID="11" TO ACTIVITY ID="21" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="71" FROM ACTIVITY ID="26" TO ACTIVITY ID="65" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="78" FROM ACTIVITY ID="39" TO ACTIVITY ID="72" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="85" FROM ACTIVITY ID="52" TO ACTIVITY ID="79" TRANSITION_EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="105" FROM ACTIVITY ID="65" TO ACTIVITY_ID="87" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE_ID="106" FROM ACTIVITY_ID="72" TO ACTIVITY_ID="87" TRANSITION_EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="107" FROM ACTIVITY ID="79" TO ACTIVITY ID="87" TRANSITION_EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="115" FROM ACTIVITY ID="52" TO ACTIVITY ID="108" TRANSITION_EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="124" FROM ACTIVITY ID="108" TO ACTIVITY ID="116" TRANSITION EXPRESSION="#114# > "0"" DESCRIPTION="EMAIL ONLY EXCEPTIONS" NOTES="NOTES" />

FIG. 21T

2120

<TRANSITION NODE ID="137" FROM ACTIVITY ID="87" TO ACTIVITY ID="125" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="164" FROM ACTIVITY_ID="18" TO _ACTIVITY ID="152" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="165" FROM ACTIVITY ID="21" TO ACTIVITY ID="152" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE ID="166" FROM ACTIVITY ID="152" TO ACTIVITY ID="26" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE_ID="167" FROM_ACTIVITY_ID="152" TO_ACTIVITY_ID="39" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> <TRANSITION NODE_ID="168" FROM ACTIVITY ID="152" TO ACTIVITY ID="52" TRANSITION EXPRESSION="" DESCRIPTION="DESCRIPTION" NOTES="NOTES" /> </DF WORKFLOW TRANSITIONS> - <DF WORKFLOW EDITOR> <ACTIVITY_VISUAL_EDITING NODE_ID="11" YCOORD="140" XCOORD="12" /> <ACTIVITY_VISUAL_EDITING NODE_ID="18" YCOORD="330" XCOORD="47" /> <ACTIVITY VISUAL EDITING NODE ID="21" YCOORD="50" XCOORD="60" /> <ACTIVITY VISUAL EDITING NODE_ID="26" YCOORD="200" XCOORD="294" /> <ACTIVITY VISUAL EDITING NODE ID="39" YCOORD="70" XCOORD="294" /> <ACTIVITY VISUAL EDITING NODE ID="52" YCOORD="320" XCOORD="304" /> <ACTIVITY VISUAL EDITING NODE ID="65" YCOORD="200" XCOORD="408" /> <activity visual editing node id="72" ycoord="70" xcoord="408" />

<ACTIVITY_VISUAL_EDITING NODE_ID="79" YCOORD="320" XCOORD="428" />
<ACTIVITY_VISUAL_EDITING NODE_ID="87" YCOORD="200" XCOORD="537" />
<ACTIVITY_VISUAL_EDITING NODE_ID="108" YCOORD="430" XCOORD="359" />
<ACTIVITY_VISUAL_EDITING NODE_ID="116" YCOORD="420" XCOORD="587" />
<ACTIVITY_VISUAL_EDITING NODE_ID="125" YCOORD="320" XCOORD="580" />

<activity_visual_editing node_id="152" ycoord="200" xcoord="160" /> </df workflow editor>

</DF_WORKFLOW>

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FIG. 22A

2201

<DP_QUERY_DEF VERSION="1">
 <DPA_IDENTIFIERS DATA_SET="OAS" WH_OWNER_NAME="PART"/>
 <HINTS/>
 <COLUMN DEFS>

COLUMN_NAME="DEPARTMENT_DESC" COLUMN_ALIAS="DEPT_DESC" COLUMN_SORT_ORDER="2" COLUMN_SORT_ATTRIBUTE="ASC" COLUMN_TYPE="ATTRIBUTE" COLUMN_EXPR="" COLUMN_POSITION="2" TABLE ALIAS="DEPARTMENT_D" COLUMN_TAG="DEPT_DESC"/>

FIG. 22B

u

```
<TABLE DEFS>
    <TABLE_DEF TABLE_ALIAS="VENDOR_D" TABLE_NAME="VENDOR_D"/>
    <TABLE_DEF TABLE_ALIAS="AP_INV_DETAIL_F"
TABLE NAME="AP INV DETAIL_F"/>
    <TABLE DEF TABLE ALIAS="INCOME_STMT_A"
TABLE NAME="INCOME STMT A"/>
    <TABLE_DEF TABLE_ALIAS="DEPARTMENT_D"
TABLE NAME="DEPARTMENT D"/>
    <TABLE DEF TABLE_ALIAS="INC_STMT_LINES_D"
TABLE NAME="INC STMT LINES D"/>
  </TABLE DEFS>
  <DETAIL FILTERS>
    <FILTER FILTER_TYPE="VALUE" COLUMN_TEXT="PERIOD_KEY"
TABLE_ALIAS="AP_INV_DETAIL_F" FILTER_PREC_OPER="AND"
FILTER_OPERATOR="=">
     </FILTER>
    <FILTER FILTER_TYPE="VALUE" COLUMN_TEXT="VENDOR_TYPE"
TABLE_ALIAS="VENDOR_D" FILTER_PREC_OPER="AND" FILTER_OPERATOR="=">
     <FILTER_VALUE VALUE_DATA_TYPE="STRING">EMPLOYEE
FILTER VALUE>
    </FILTER>
    <FILTER FILTER_TYPE="VALUE" COLUMN_TEXT="COMPANY_KEY"
TABLE_ALIAS="AP_INV_DETAIL_F" FILTER_PREC_OPER="AND"
FILTER OPERATOR="=">
     <FILTER_VALUE VALUE_DATA_TYPE="STRING">01</FILTER_VALUE>
    <FILTER FILTER_TYPE="VALUE" COLUMN_TEXT="DEPARTMENT_KEY"
TABLE_ALIAS="AP_INV_DETAIL_F" FILTER_PREC_OPER="AND"
FILTER OPERATOR="=">
     <FILTER_VALUE VALUE_DATA_TYPE="STRING">560</FILTER_VALUE>
    </FILTER>
   </DETAIL FILTERS>
   <AGGREGATE FILTERS>
    <FILTER FILTER TYPE="VALUE"
COLUMN_TEXT="SUM(INVOICE_LINE_AMOUNT)" TABLE_ALIAS="AP_INV_DETAIL_F"
FILTER_PREC_OPER="AND" FILTER_OPERATOR=">">
      <FILTER_VALUE VALUE_DATA_TYPE="NUMBER">0</FILTER_VALUE>
    </FILTER>
   </AGGREGATE FILTERS>
  </DP QUERY DEF>
```

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FIG. 23A

2301

- <DP DIMENSIONS>

- <DIMENSION LABEL="ACCOUNTING DATE" NAME="ACCOUNTING_DATE_D"><ATTRIBUTE LABEL="ACCOUNTING DATE KEY"

NAME="ACCOUNTING DATE KEY" />

<ATTRIBUTE LABEL="ACCOUNTING MONTH" NAME="ACCOUNTING_MONTH" />
<ATTRIBUTE LABEL="ACCOUNTING PERIOD" NAME="ACCOUNTING_PERIOD" />
<ATTRIBUTE LABEL="ACCOUNTING PERIOD KEY"</pre>

NAME="ACCOUNTING PERIOD KEY" />

<a tribute label="accounting period quarter"

NAME="ACCOUNTING PERIOD QUARTER" />

<a tribute label="accounting quarter"

NAME="ACCOUNTING QUARTER" />

<ATTRIBUTE LABEL="ACCOUNTING WEEK ENDING"</p>

NAME="ACCOUNTING WEEK ENDING" />

<attribute label="accounting year" name="accounting_year" /> </dimension>

- <DIMENSION LABEL="ACCOUNT" NAME="ACCOUNT_D">

<a tribute label="account" name="account" />

<attribute label="line name" name="line name" />

<attribute label="line sequence key" name="line sequence key" />

<a tribute label="report section" name="report section" />

<a tribute label="report sequence" name="report_sequence" />

<attribute label="account description" name="account_desc" /> </dimension>

- <DIMENSION LABEL="ACCOUNT ROLLUPS" NAME="ACCOUNT_RLUP_D">

<ATTRIBUTE LABEL="ACCOUNT" NAME="ACCOUNT" />

<a tribute label="account rollup description"

NAME="ROLLUP DESC" />

<ATTRIBUTE LABEL="ACCOUNT ROLLUP CODE" NAME="ROLLUP_CODE" />
<ATTRIBUTE LABEL="ACCOUNT DESCRIPTION" NAME="ACCOUNT_DESC" />
</DIMENSION>

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FIG. 23B

2302

- <DIMENSION LABEL="AP HOLD CODES" NAME="AP_HOLD_CODE_D">
 <ATTRIBUTE LABEL="AP HOLD CODE" NAME="AP_HOLD_CODE" />
 <ATTRIBUTE LABEL="AP HOLD CODE DESCRIPTION"

NAME="AP HOLD CODE DESC" />

</DIMENSION>

- <DIMENSION LABEL="AP INVOICES" NAME="AP_INVOICE_D">
 <ATTRIBUTE LABEL="AP INVOICE NUMBER" NAME="AP_INVOICE" />
 <ATTRIBUTE LABEL="AP INVOICE DATE" NAME="AP_INVOICE_DATE" />
 <ATTRIBUTE LABEL="AP INVOICE KEY" NAME="AP_INVOICE_KEY" />
 </DIMENSION>

</DIMENSION>

- <DIMENSION LABEL="AP PAYMENT TERMS" NAME="AP_PAYMENT_TERM_D">
<ATTRIBUTE LABEL="AP PAYMENT TERM" NAME="AP_PAYMENT_TERM" />
<ATTRIBUTE LABEL="AP PAYMENT TERM DESCRIPTION"

NAME="AP_PAYMENT_TERM_DESC" />
<ATTRIBUTE LABEL="AP PAYMENT TERM KEY"
NAME="AP_PAYMENT_TERM_KEY" />
</DIMENSION>

<ATTRIBUTE LABEL="END DATE ACTIVE" NAME="BUYER_END_DATE_ACTIVE" />
<ATTRIBUTE LABEL="BUYER KEY" NAME="BUYER_KEY" />

<ATTRIBUTE LABEL="START DATE ACTIVE"

NAME="BUYER_START_DATE_ACTIVE" /> </DIMENSION>

```
FIG. 23C
                                                       2303
- <DIMENSION LABEL="COMPANY" NAME="COMPANY_D">
 <attribute label="company" name="company" />
 <ATTRIBUTE LABEL="COMPANY DESCRIPTION" NAME="COMPANY DESC" />
 <attribute label="company key" name="company key" />
 </DIMENSION>
- < DIMENSION LABEL="CURRENCY" NAME="CURRENCY D">
 <attribute label="currency" name="currency" />
 <a tribute label="currency description" name="currency desc" />
 <attribute label="currency key" name="currency_key" />
 </DIMENSION>
- < DIMENSION LABEL="DEPARTMENT" NAME="DEPARTMENT D">
 <attribute label="department" />
 <ATTRIBUTE LABEL="DEPARTMENT KEY" NAME="DEPARTMENT KEY" />
 <ATTRIBUTE LABEL="DEPARTMENT DESCRIPTION" NAME="DEPARTMENT DESC" /</p>
 </DIMENSION>
- < DIMENSION LABEL="DEPARTMENT ROLLUPS" NAME="DEPARTMENT RLUP D">
 <attribute label="department" name="department" />
 <attribute label="department rollup desc" name="rollup desc" />
 <attribute label="department rollup code" name="rollup code" />
 <ATTRIBUTE LABEL="DEPARTMENT DESCRIPTION" NAME="DEPARTMENT DESC" /</p>
 <a tribute label="department key" name="department key" />
 </DIMENSION>
- <DIMENSION LABEL="AP DUE DATES" NAME="DUE DATE D">
 <a tribute label="due date key" name="due date key" />
 <attribute label="Due month" name="Due month" />
 <attribute label="Due Period" Name="Due Period" />
 <attribute label="due period key" name="due period key" />
 <attribute label="Due Period Quarter" name="Due Period Quarter" />
 <attribute label="due quarter" name="due quarter" />
 <attribute label="due week ending" name="due week ending" />
 <a tribute label="due year" name="due year" />
 </DIMENSION>
- <DIMENSION LABEL="INVOICE DATES" NAME="INVOICE DATE D">
 <a tribute label="invoice date key" name="invoice date key" />
 <attribute label="invoice month" name="invoice month" />
 <ATTRIBUTE LABEL="INVOICE PERIOD" NAME="INVOICE PERIOD" />
 <a tribute label="invoice period key" name="invoice_period_key" />
 <attribute label="invoice period quarter"</a>
NAME="INVOICE PERIOD QUARTER" />
 <attribute label="invoice quarter" name="invoice quarter" />
 <a tribute label="invoice week ending" name="invoice week ending" />
 <attribute label="invoice year" name="invoice_year" />
 </DIMENSION>
```

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2304
- <DÎMÊNSION LABEL="JE BATCHS" NAME="JE_BATCH_D">
 <attribute label="actual flag" name="actual flag" />
 <a tribute label="default period name"
NAME="DEFAULT PERIOD NAME" />
 <attribute label="je batch key" name="je batch key" />
 <attribute label="name" name="name" />
 <attribute label="org id" name="org id" />
 <a tribute label="description" name="description" />
 <attribute label="date created" name="date created" />
 </DIMENSION>
- <DIMENSION LABEL="ORGANIZATIONS" NAME="ORGANIZATION D">
 <attribute Label="organization" name="organization" />
 <attribute label="organization key" name="organization key" />
 <attribute Label="organization type" name="organization type" />
 </DIMENSION>
- < DIMENSION LABEL="PA PROJECTS" NAME="PA PROJECT D">
 <attribute label="project key" name="pa project key" />
 <a tribute label="project complete date"
NAME="PROJECT COMPLETE_DATE" />
 <ATTRIBUTE LABEL="PROJECT MANAGER" NAME="PROJECT MANAGER" />
 <a href="PROJECT NAME" NAME="PROJECT NAME" />
 <ATTRIBUTE LABEL="PROJECT NUMBER" NAME="PROJECT NUMBER" />
 <ATTRIBUTE LABEL="PROJECT OFFICER" NAME="PROJECT OFFICER" />
 <a href="PROJECT SPONSOR" NAME="PROJECT SPONSOR" />
 <attribute label="project start date" name="project start date" />
 <ATTRIBUTE LABEL="PROJECT STATUS" NAME="PROJECT STATUS" />
 <a tribute label="project title" name="project title" />
 <ATTRIBUTE LABEL="PROJECT TYPE" NAME="PROJECT TYPE" />
 </DIMENSION>
- <DIMENSION LABEL="PA TASKS" NAME="PA TASK D">
 <a tribute label="parent task key" name="parent task key" />
 <attribute label="task location" name="task location" />
 <attribute label="task name" name="task name" />
 <a tribute label="task manager" name="task manager" />
 <attribute label="top task name" name="top_task_name" />
 <attribute label="top task key" name="top task key" />
 <a tribute label="task wbs" name="task wbs" />
 <a tribute label="task start date" name="task start date" />
 <a tribute label="task number" name="task number" />
 <a tribute label="task description" name="task desc" />
 <attribute label="parent task name" name="parent task name" />
 <attribute label="project key" name="pa project key" />
 <ATTRIBUTE LABEL="TASK COMPLETE DATE" NAME="TASK COMPLETE DATE" /</p>
 <a href="fask"><a hre
 </DIMENSION>
```

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FIG. 23E
                                                       2305
- < DIMENSION LABEL="PERIODS" NAME="PERIOD D">
 <attribute label="period" name="period" />
 <ATTRIBUTE LABEL="PERIOD END DATE" NAME="PERIOD END DATE" />
 <a tribute label="period key" name="period key" />
 <ATTRIBUTE LABEL="PERIOD START DATE" NAME="PERIOD START DATE" />
 <a tribute label="period type" name="period type" />
 <attribute label="Quarter" name="Quarter" />
 <attribute label="Year" Name="Year" />
 </DIMENSION>
- <DIMENSION LABEL="PRODUCT" NAME="PRODUCT D">
 <attribute label="product" name="product" />
 <a tribute label="product description" name="product desc" />
 <attribute label="product key" name="product_key" />
 </DIMENSION>
- <DIMENSION LABEL="PA PROJECT CLASSES" NAME="PROJECT CLASS_D">
 <a tribute label="PROJECT CLASS CATEGORY"
NAME="PROJECT CLASS CATEGORY" />
 <ATTRIBUTE LABEL="PROJECT CLASS CODE" NAME="PROJECT_CLASS_CODE" /</p>
 <ATTRIBUTE LABEL="PROJECT CLASS DESCRIPTION"</p>
NAME="PROJECT CLASS DESCRIPTION" />
 <attribute label="project key" name="project_key" />
 </DIMENSION>
- <DIMENSION LABEL="PO REQUESTORS" NAME="REQUESTOR_D">
 <attribute label="requestor" name="requestor" />
 <ATTRIBUTE LABEL="REQUESTOR KEY" NAME="REQUESTOR KEY" />
 </DIMENSION>
- <DIMENSION LABEL="SUB-ACCOUNT" NAME="SUB_ACCOUNT_D">
 <attribute label="sub-account" name="sub-account" />
 <attribute label="Sub-account key" name="Sub-account_key" />
 <a tribute label="SUB-ACCOUNT DESCRIPTION"
NAME="SUB ACCOUNT DESC" />
 </DIMENSION>
- <DIMENSION LABEL="AP VENDORS" NAME="VENDOR D">
 <ATTRIBUTE LABEL="ACTIVE END DATE" NAME="ACTIVE END DATE" />
 <attribute label="active flag" name="active flag" />
 <attribute label="active start date" name="active start date" />
 <attribute label="vendor site address line1" name="address line1" />
 <a tribute label="Vendor site address line2" name="address_line2" />
 <attribute label="vendor site address line3" name="address_line3" />
 <attribute label="vendor site area code" name="area code" />
 <a tribute label="Vendor site city" name="city" />
 <a tribute label="vendor hold reason" name="hold reason" />
 <a tribute label="vendor site phone number" name="phone_number"</a>
```

FIG. 23F

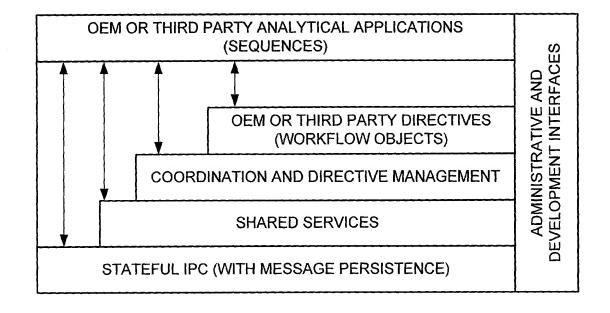
```
<a tribute label="vendor site province" name="province" />
 <attribute label="vendor site state" name="state" />
 <attribute label="vendor tax federal flag"
NAME="TAX FEDERAL REPORT FLAG" />
 <attribute label="vendor tax reporting name"
NAME="TAX REPORTING NAME" />
 <a tribute label="vendor tax state flag"
NAME="TAX STATE REPORT FLAG" />
 <attribute label="vendor 1099 number" name="vendor_1099_num" />
 <attribute label="Vendor 1099 Type" NAME="Vendor_1099_Type" />
 <attribute label="vendor corporate group"
NAME="VENDOR CORPORATE GROUP" />
 <a tribute label="vendor industry class"
NAME="VENDOR INDUSTRY CLASS" />
 <attribute label="vendor key" name="vendor key" />
 <attribute label="vendor name" name="vendor name" />
 <a tribute label="vendor number" name="vendor number" />
 <a tribute label="Vendor organization type"
NAME="VENDOR_ORG_TYPE" />
 <attribute label="vendor payment priority"
NAME="VENDOR PAYMENT PRIORITY" />
 <attribute label="vendor pay group" name="vendor pay group" />
 <a tribute label="vendor site code" name="vendor site code" />
 <attribute label="vendor site key" name="vendor site key" />
 <attribute label="vendor type" name="vendor type" />
 <attribute label="vendor site zip" name="zip" />
 </DIMENSION>
- <DIMENSION LABEL="AP INVOICE DETAILS" NAME="AP INV DETAIL F">
 <a tribute label="accounting date" name="accounting_date" />
 <attribute label="accounting date key" name="accounting_date_key"
 <attribute label="account key" name="account key" />
 <attribute label="approval status" name="approval status" />
 <attribute label="ap invoice key" name="ap invoice key" />
 <attribute label="ap invoice type key" name="ap_invoice_type_key" />
 <attribute label="ap payment term key" name="ap payment_term_key"
 <attribute label="buyer key" name="buyer key" />
 <attribute label="company key" name="company key" />
 <a tribute label="invoice currency code" name="currency key" />
 <a tribute label="department key" name="department key" />
 <a tribute label="due date" name="due date" />
 <attribute label="due date key" name="due date key" />
 <a href="https://www.ncice.com/ncice.amount"/> ATTRIBUTE LABEL="TOTAL INVOICE AMOUNT" />
```

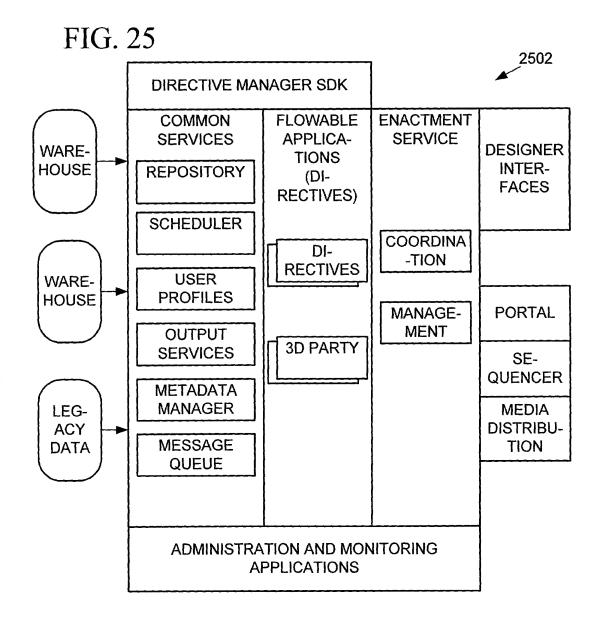
FIG. 23G

```
<a href="INVOICE DATE" NAME="INVOICE DATE" />
 <attribute label="invoice date key" name="invoice" date key" />
<ATTRIBUTE LABEL="INVOICE DESCRIPTION" NAME="INVOICE DESC" />
<a tribute label="invoice id key" name="invoice id key" />
<a tribute label="invoice line description"
NAME="INVOICE LINE DESC" />
<a tribute label="invoice line number" name="invoice line number" /
<a tribute label="invoice line type" name="invoice line type" />
<attribute label="invoice number" name="invoice number" />
 <attribute label="invoice tax amount" name="invoice tax amount" />
<a tribute label="organization key" name="organization key" />
<attribute Label="paid amount" name="paid amount" />
 <attribute label="pa project key" name="pa project key" />
<attribute label="pa task key" name="pa task key" />
<attribute label="period key" name="period key" />
<attribute label="posted flag" name="posted_flag" />
<attribute label="po creation date" name="po created date" />
 <a tribute label="po number" name="po number" />
 <attribute label="product key" name="product key" />
 <a tribute label="recurring invoice flag"
NAME="RECURRING INVOICE FLAG" />
 <attribute label="sub-account key" name="sub-account key" />
 <a tribute label="translated currency code"
NAME="TRANSLATED CURRENCY CODE" />
<a tribute label="vendor key" name="vendor key" />
 </DIMENSION>
 </DP DIMENSIONS>
- <MEASURES LABEL="AP INVOICE DETAILS" NAME="AP INV DETAIL F">
 <MEASURE LABEL="ACCOUNTING (PRE-AP) LAG DAYS"</p>
NAME="ACCOUNTING LAG DAYS" />
 <MEASURE LABEL="INVOICE LINE AMOUNT" NAME="INVOICE LINE AMOUNT" />
 <MEASURE LABEL="INVOICE LINE EXCHANGE RATE VARIANCE"</p>
NAME="INVOICE LINE EXCH RATE VAR" />
 <MEASURE LABEL="INVOICE LINE PRICE VARIANCE"</p>
NAME="INVOICE LINE PRICE VARIANCE" />
 <MEASURE LABEL="NUMBER OF INVOICE LINES"</p>
NAME="NUMBER INVOICE LINES" />
 <MEASURE LABEL="TRANSLATED CURRENCY AMOUNT"</p>
NAME="TRANSLATED_CURRENCY AMOUNT" />
 <MEASURE LABEL="UNPAID AMOUNT" NAME="UNPAID_AMOUNT" />
 </MEASURES>
 </DP SCHEMA DOC>
```

FIG. 24





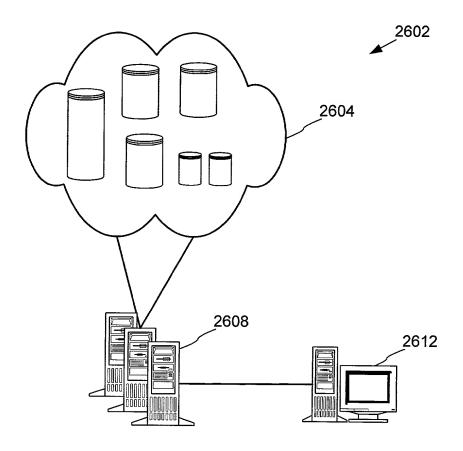


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Gregory L. Maurer, Esq., Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, Oregon 97204, (503) 226-7391, Inventors: Scheurich et al., Title: SYSTEMS AND METHODS FOR DEFINING EXECUTABLE SEQUENCES TO PROCESS INFORMATION FROM A DATA COLLECTION, Application No. 09/925,103, Filed: August 9, 2001, Attorney Docket No.: 6115-60713, Page 103 of 103

FIG. 26



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